

ART IN PRIMITIVE GREECE  
AS TREATED BY GEORGES PERROT AND CHARLES CHIEPIEZ.

By the President, FRANCIS C. PENROSE, M.A., F.R.S.

THE work of MM. Perrot and Chipiez, of which the book under notice is a translation,\* embraces so many objects that in this notice the discussion of many of them must be curtailed. One may dismiss the introductory chapter and commence with calling attention to the judicious remarks on the effect of the geography and climate on the character of the people (pp. 28, 29, &c.). A country of harbours, superficially smaller than Portugal, but having a seaboard more extensive than that of Spain; supplied with defensive mountain barriers, calculated to isolate the inhabitants into small groups; with scarcely a road until Roman times; with an atmosphere healthy to the body, and, by its brilliancy, encouraging the artistic faculty; abounding in marble, thus facilitating the sculpture of the great period; an almost entire absence of metal making commerce a necessity. All these circumstances, however, would have had but little effect had not the genius of the people contributed its share.

It is a most important subject of speculation to try and discover the derivation of this wonderful people, particularly the later Hellenes of the Great Period. "The most authoritative historians, such as Herodotus and Thucydides, whilst they lay stress on the slight resemblance observable between Pelasgic and Greek dialects, are inclined to believe that no real difference of race existed between the two peoples. They are disposed to see in the Hellenes tribes which through some sort of natural selection came out of the Pelasgian stock and rose to superior culture.† It is a highly probable hypothesis. Nowhere do we find, either in a mythic or historical form, the faintest echo of a religious strife such as would have taken place had Pelasgian gods been superseded by Hellenic ones." From this point (pp. 55-111) follows a lengthy discussion on the obscure movements which seem to have taken place in the country, ending with the Dorian conquest of the Peloponnesus—about the eleventh century B.C.—not without interest, but having little or nothing to do with architecture. The same may be said of the next chapter (pp. 112-139), on the Stone Age in Greece. Paleolithic specimens are rare, but neolithic not infrequent. At p. 139 we touch primitive architecture in the island of Thera—now Santorin—an island of extreme interest to the geologist on account of the changes wrought by subterranean fires—changes supposed to have taken place some sixteen or seventeen hundred years B.C. There is not much to tell architecturally about Thera, but it seems to mark a period. A hundred pages follow with an account of Troy—that is, of Hissarlik—which shares with Tiryns and Mycenæ the chief interest in these volumes, the three sites the exploration of which is almost solely due to the energy and liberal enthusiasm of Dr. Schliemann, led on by his undying belief in the verbal inspiration of Homer. The reader is recommended, in addition to the account which MM. Perrot and Chipiez give of

\* *History of Art in Primitive Greece—Mycenian Art.* From the French of Georges Perrot and Charles Chipiez. Illustrated with 544 engravings in the text and 20 coloured

plates. 2 vols. Large 8o. Lond. 1894. Price 42s. Messrs. Chapman & Hall, 11, Henrietta Street, Covent Garden.

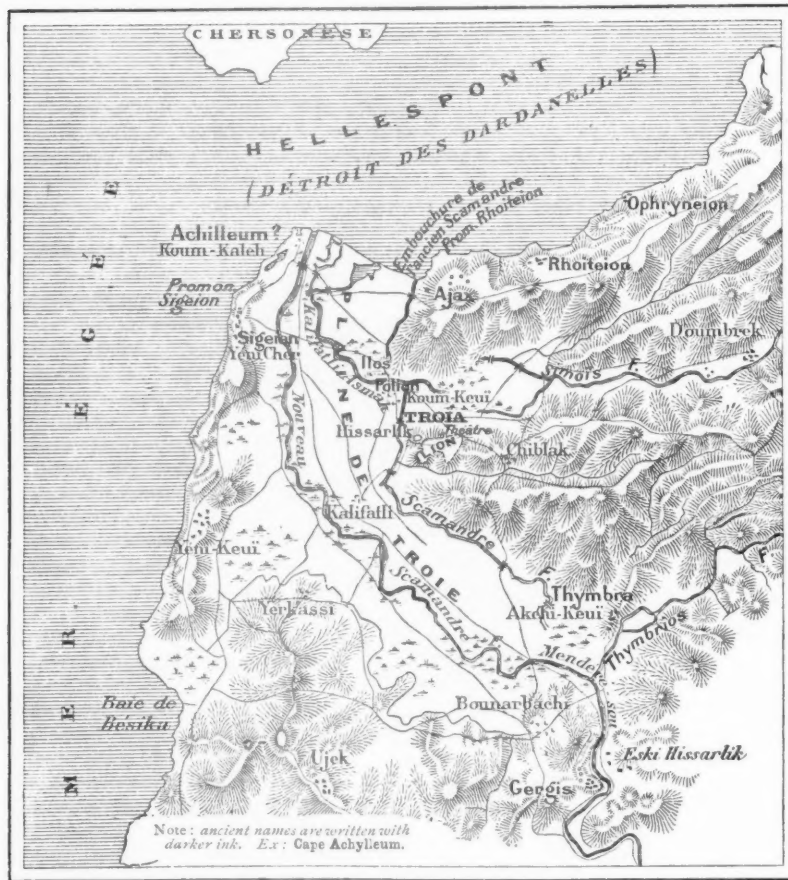
† *Herod.* i. 58 and i. 60.

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Troy in this volume, to refer also to Schuchardt's work, entitled *Schliemann's Ausgrabungen in Troja, Tiryns, &c.* [English translation by Miss E. Sellars: Macmillan, 1891.]

Plate I. in the present work is sufficient to show at a glance the extreme complication of this site of Hissarlik; it is the more so because Dr. Schliemann's first excavations in 1872 were not made with the same care that he afterwards applied—in fact, he was so

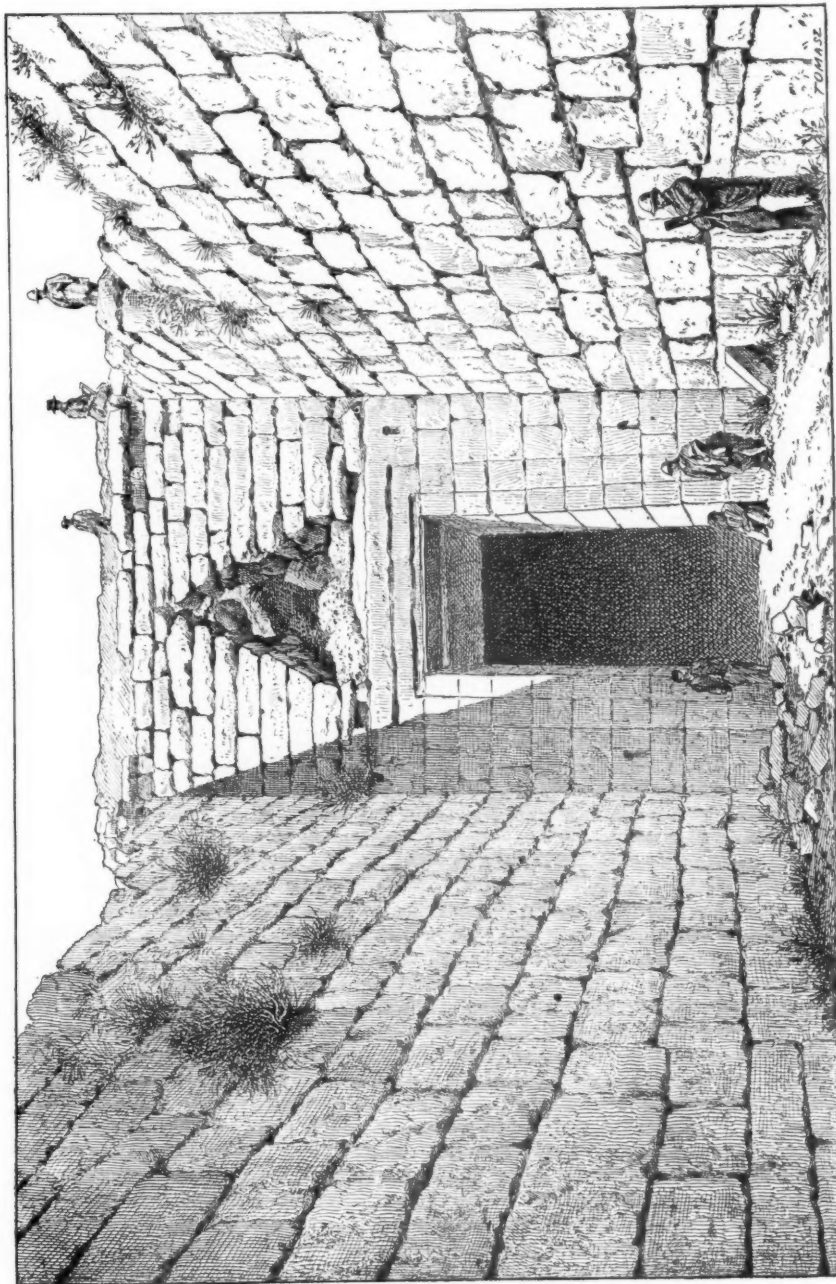
dominated with the idea that the Homeric descriptions were topographically accurate that nothing which did not conform to that hypothesis was treated with any respect; and much evidence which, had it been left alone, would subsequently have been usefully observed was utterly lost. Several different strata of occupation were found on this site, and one of them, called in this book the Third Period, but in Schuchardt's the Second, is that which particularly claims attention. Our authors discuss



[FIG. 33.]—MAP OF TROY (AFTER SCHLIEMANN).

many interesting points of construction, but seem to carry on to a very unnecessary length the discussion of the analogies and differences between Homer's description of Troy and the remains as discovered. There results, however, so much analogy between the architecture of this Third Period city and that of the more easily authenticated cities of Tiryns and Mycenæ that the authors have no difficulty in coming to the conclusion that, although Homer's description of Troy bears a highly poetical dress, he nevertheless described to his contemporaries a site which was well understood by them, and that Hissarlik has the best claim of any of the places which have been put forward to be the true site of the city of Priam.

At p. 255 we open upon a much clearer description—namely, of the remains of Tiryns,



[FIG. 121.]—THE TREASURY OF ATREUS. PRESENT STATE.

a site which has never been at all doubtful, and has not been much interfered with by settlements earlier or later than that of its builders in the Pelasgic period. The plan of this fortress in Plate II. forms a strong contrast with the Plate I. of Troy on the hill of Hissarlik. There are several other very good illustrations of parts of the structure. The reader may be cautioned against an error in p. 274, line 25. The letter *r* on the plan does not refer to the entrance which the author is describing, but to the sally port or postern at the bottom of the staircase on the other side of the hill.

At p. 294 the third great example of a primitive fortress is described, viz. Mycenæ. This example, as well as the previous one, is well illustrated, and in this edition the English student has the further advantage of several of the woodcuts from Schliemann's *Tiryns*



[FIG. 217.]—FRAGMENT OF SLAB FROM CEILING FROM DOMED TOMB AT ORCHOMENUS.  
ABOUT ONE-SEVENTH ACTUAL SIZE.

and Mycenæ, as the Publishers acknowledge in the Preface. So much of this fortress and the so-called Treasury of Atreus remained above ground before the late excavations that it is extraordinary that Strabo should have said that it had been so entirely destroyed by the Argives "that no trace of it remained in his day." Pausanias, however, describes these

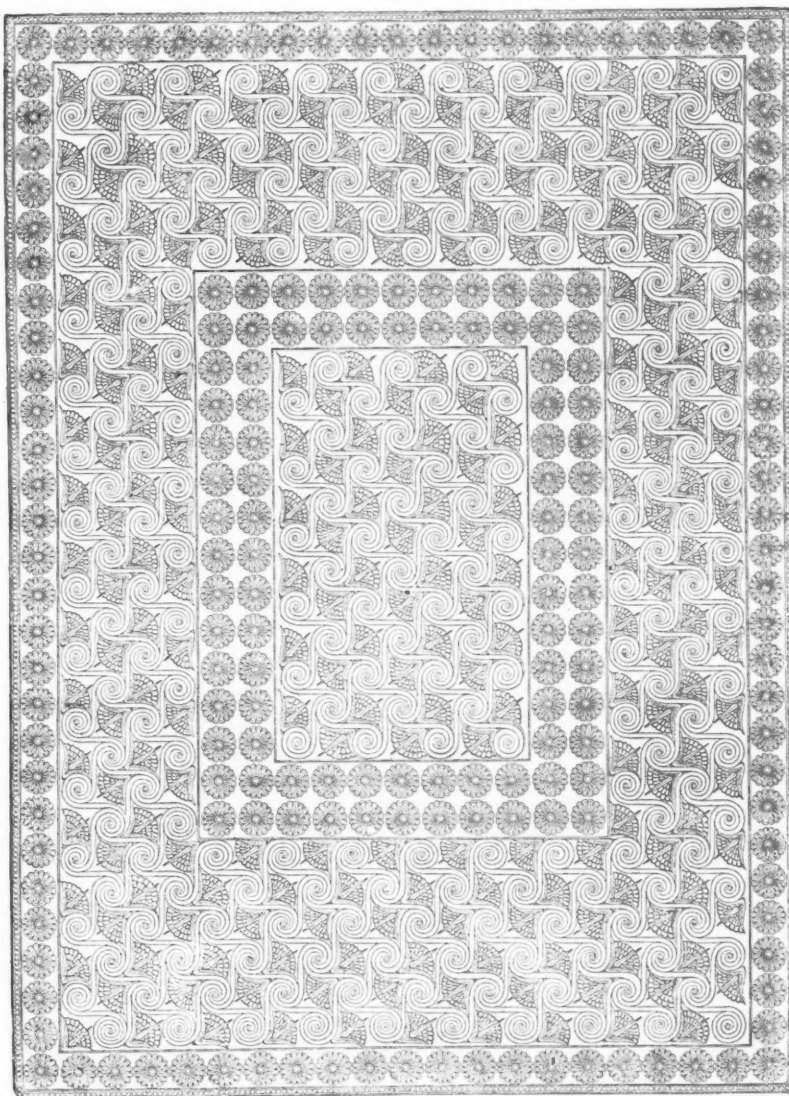
places very distinctly, and our authors argue, with much plausibility, that whilst he must have actually seen the Lion's Gate and the Treasury of Atreus [p. 527], the royal tombs discovered by Schliemann were probably hidden at the time of his visit, and that he quoted in what he recorded on the subject from an earlier chronicler named Hellanicus. Whilst on the subject of the references to passages from ancient authors quoted in this work, it is a serious defect that the references are hardly ever complete, the name of the author without any further reference being thought to be sufficient. After the account given of Mycenæ the description follows of a number of tombs found at the Argolic Heræum, at Nauplia, and in parts of Attica. The authors then proceed to the Acropolis of Athens. In p. 404 there is a curious error as to the height of the Acropolis, which is stated to rise above the general level *nine*



*hundred and eighty-five metres.* Had it been written 985 the error might easily have arisen from the misplacement of the decimal point, for 98·5 would be a very fair statement of the case. Also it is not accurate to state that the rock, except at the western end, is so precipitous on all sides as to defy all attempts at an escalade; in point of fact, it was actually scaled by the Persians in the neighbourhood of the Erechtheum.

Respecting the "Pelasgi-con," p. 405, the authors put forward a view which seems to have something to recommend it, although it differs from the general opinion, which limits the quarter bearing this name to the western part of the hill; their view being that it formed — at any rate originally — a complete belt around the Acropolis; but the arguments on which they rely could only be readily understood by those with a minute local knowledge of the place.

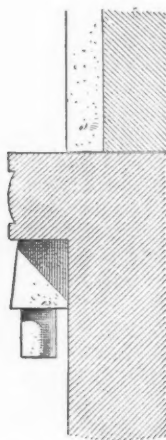
In treating of the Pnyx the authors reject its usual identification as the place of assembly—the *Bema* of Pericles and Demosthenes—for the much-controverted theory of Welcker and others, who consider it as a sanctuary of Jupiter.



[FIG. 218.]—RESTORATION OF CEILING IN DOMED TOMB AT ORCHOMENUS. ONE-THIRTIETH ACTUAL SIZE.

At pp. 418-429 is the description of the very remarkable domed tomb at Orchomenus, almost vying with the Treasury of Atreus at Mycenæ in size, and quite so in regard of sumptuousness. Figs. 217 and 218 (pp. 528-529), and several of the following cuts, should be referred to in connection with this building—beautiful in themselves, and also showing germs of the ornaments in use in the Great Period. At p. 446 we find allusion to the practically new language imported into archæological investigations by the examination of potsherds, signs and evidences of date which had escaped the observation of the earliest explorers. For this “sherd lore,” as it may be called, the Mycenæ discoveries furnish an important and recognised standard of comparison. At p. 459 attention is directed to the curious fact that whilst the Greeks, in these primitive times, were accustomed to use lime for making plaster with great effect, they never employed it for making mortar, but were contented with clay for this purpose. It is rather singular that in speaking of the great size of the stones used in the Cyclopean walls in Greece no mention is made of the buildings of the same race of people in Italy, where sometimes—and particularly at Alatri—even larger stones have been used than any at Tiryns.

At pp. 469-470 is a discussion on the comparative antiquity of the walls built with approximately horizontal courses and of those in which polygonal blocks have been used, and the earlier date is ascribed to the former method. There will be differences of opinion on this point, but it is certainly true that some walls of polygonal masonry can be referred to dates of only moderate antiquity. At pp. 481-483 the origin is considered of door openings diminishing upwards, which are attributed to timber door jambs having been used inclined towards one another, figs. 189-190. At p. 492, referring to the fact that the columns used at Mycenæ and Orchomenus diminished from the top downwards, contrary to the now received method, the primitive practice is derived by our authors from the original wooden construction of the superstructure in domestic buildings, the large top diameter of the column offering a stronger hold upon the necessary framing; but then follows the strange observation that the props of our chairs and tables are a “survival of this primitive arrangement”—an illustration it might be, but not a survival, for the cases of the two things, buildings and furniture, are quite distinct. The *point d'appui* for the building is the ground; that of the piece of furniture is its seat or table-top.



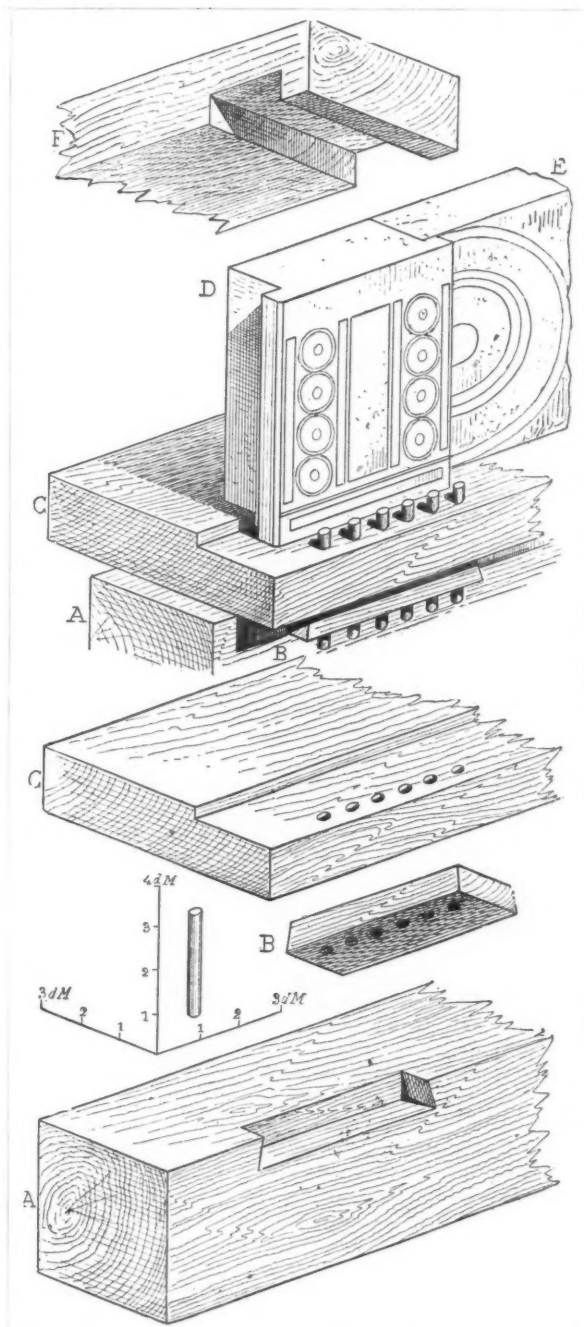
[FIG. 304.]—GUTTA IN C.  
TEMPLE AT SELINUS.

The discussion of the timber construction of this period is useful in showing how the timber type, imitated in the maturer style in stone, took its origin. The subject is pursued further in the second volume. The labyrinth scroll was evidently a great favourite in the ornamentation of this period; but when a spiral is used, it is always the simple spiral in which the convolutions increase in diameter by equal increments. The more beautiful and expanding scroll of the Ionic volute, &c., was a later invention. Towards the end of the volume there is a discussion on the use of metal coverings, which added greatly to the richness of the principal apartments, whether of the palaces or the tombs. The reader may see in these the relationship to Phœnician art by reference to the gold overlays of so much of the architecture of Solomon's Temple and the connection of Hiram's Tyrian workmen with that building.

At p. 5 of vol. ii. some tombs are referred to at Mycenæ, in which the skeletons were found in a sitting posture, and which seemed to be quite different from any found elsewhere in Greece. It is remarkable that Mr. Flinders Petrie has lately discovered, at a place called Nubt-Ombos, near Denderah, a number of tombs belonging to

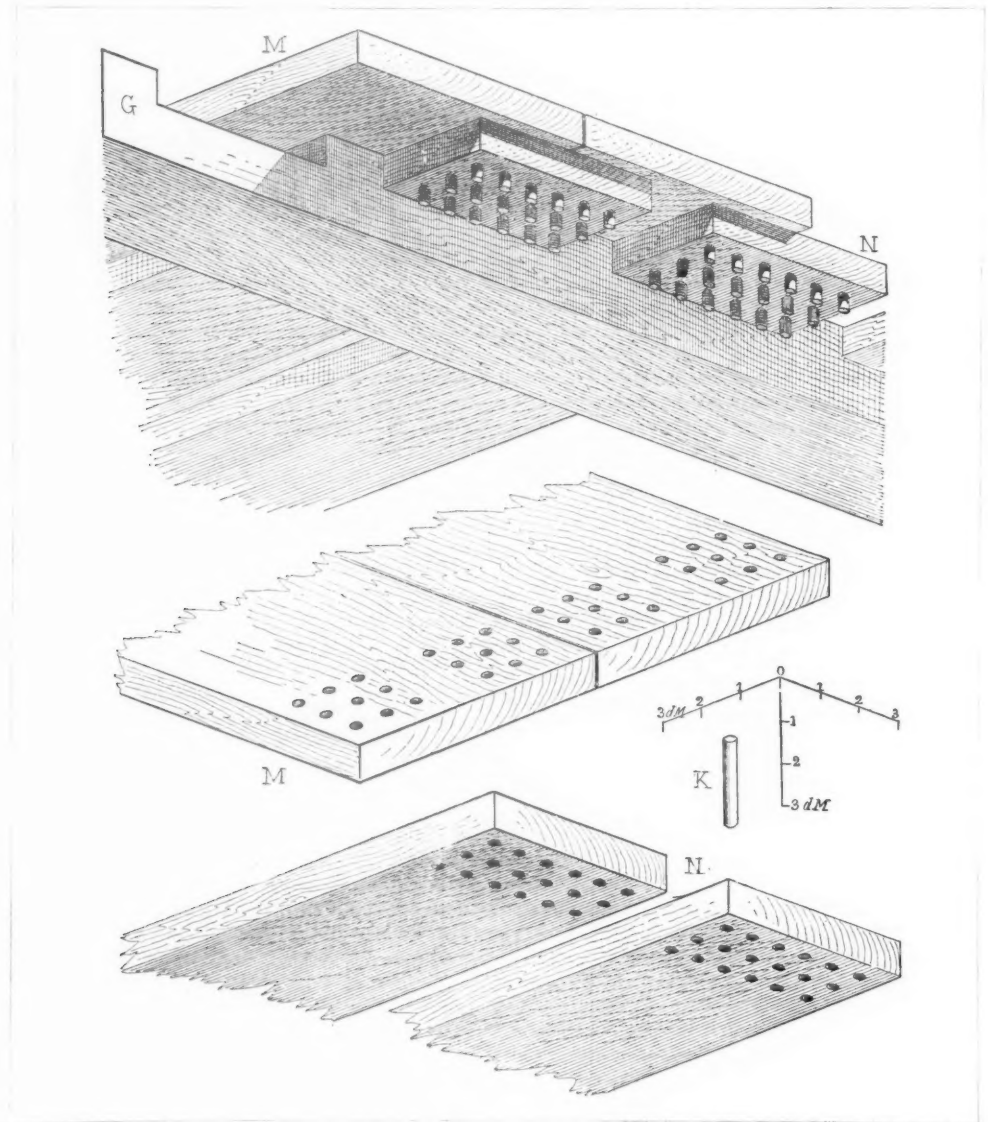
a race very different from any known race of Egyptians, and of which the relationship has not yet been identified, in which the bodies were placed in a very similar posture.

Although the frontals of the beehive tombs, such as the Treasury of Atreus, were generally elaborately ornamented, it appears that it was the final intention, as soon as the family sepulchres were all complete, to entirely conceal these frontals with a solid wall. As the graves which have been discovered in them were always interments, this filling up would have taken place much more rapidly than a columbarium of the Roman pattern, in which ashes only were deposited. The authors find no signs whatever of cremation at Mycenæ, which is remarkable, as, according to Homer, it was the usual form of burial—at any rate for a chief. From pp. 19 to 45 we have a discussion at great length on the general character of the shaft and beehive tombs, with the conclusion that the former were the earliest, and probably belonged to a different dynasty, namely, the *Perseidæ*, the latter being those of the *Pelopidæ*. The elaborate architecture of these latter is also in favour of that view. It is right, however, to say that there are differences of opinion on this point. A detailed description of the tomb called the Treasury of Atreus follows, with Plates IV.-VII., the first giving the details of the present condition, the three latter as restored by the authors, with their reasons for each step very fully detailed in the text. Chapter VI. consists of a discussion on the religious architecture of the primitive period. Any existing remains which



[FIG. 305.]—MYCENIAN PALACE. SECOND EPOCH. SHOWING THE SEVERAL PIECES OF THE ENTABLATURE: ARCHITRAVE AND FRIEZE.

can be identified are shown to be very scant, and it is also true that the passages in which Homer mentions temples of the gods are few in number. This does not, however, prove



[FIG. 308.]—MYCENIAN PALACE. SECOND EPOCH. SHOWING THE SEPARATE PIECES OF THE CORNICE.

that there may not have been a considerable number, though of comparatively small size, and which have subsequently been rebuilt on the same foundations.

In some temples, of which considerable remains exist, there are not wanting evidences of portions of much greater antiquity than the general mass of the structure, and this claim of



great antiquity is supported in several notable instances by recent investigations based on their orientation. There are, however, in this volume, descriptions of two ancient shrines, one on Mount Ocha, in Eubœa, and the other in Delos (see p. 95). They are both very small, and seem thereby to confirm the view already advanced that this early epoch was not a time of much display in temple architecture. On p. 97 the authors, without however assigning any argument, refer the Delos example to a comparatively late period—the eighth or ninth century B.C. In their description of Plates VIII., IX., X., the authors justify the introduction of wooden galleries on the top of the citadel walls by reference to a decree respecting a restoration of the walls of Athens dated A.D. 323. It should be stated, however, that the relief on the Nereid tomb, of a much earlier date, which represents a besieged city, shows nothing of the kind, but battlements only. The different styles of masonry in the walls of Mycenæ are explained (p. 110) by successive reconstructions, and the polygonal masonry, as already observed, is considered to be later than that with approximately horizontal courses. In the same page the advanced character of the military engineering at Mycenæ and Tiryns over that of Troy is referred to. In Plates XI., XII., and fig. 301, the authors seem to have allowed much liberty to their fancy in the restorations of the palace architecture. The strange appearance of the columns diminishing from the top downwards seems, however, to follow the evidence as already mentioned. In the long discussion on the origin of the Doric Order there are some interesting suggestions, particularly the derivation of the guttæ from constructive pegs; and it may be allowed that the reconstruction given of the timber architecture of the palaces of this period and the explanation of the wooden types used decoratively in the later stone architecture are well dovetailed into each other. The reader will probably see how the argument applies more readily by inspection of Figs. 304, 305, and 308 [pp. 530–32], than in reading the twenty pages of text on the subject. Fig. 320 is a very plausible explanation of the form of the antæ in a Doric temple. The authors seem to decline to accept the favourite theory of the derivation of the Doric capital from the Egyptian—as, for instance, the example at Beni Hassan—but give no derivation of it themselves. The metal work depicted in Plates XVI., XVII., and XIX., fig. 391, and several others of the figures, shows a great superiority in this branch of art over sculpture and painting. Pottery, in Chapter XI., is a distinct subject in itself, and is well illustrated; and this is of the greater importance in consequence of the Mycæan pottery having become, as already noticed, an archaeological standard. The gold and silver ornaments illustrated in figs. 504 to 540 are particularly worthy of attention, and show the high order of merit to which this branch of art had attained.

In the last chapter, of recapitulation, it is argued with much probability that the primitive Achæans, to whom the marvellous works at Tiryns and Mycenæ, &c., were due, had already fallen into a great state of decadence when they were overthrown by the ruder Dorians about 1100 B.C., which for a time, but fortunately not finally, threw backward the civilisation of Greece.

Lastly, it may be observed that the wealth of illustration in this work is very remarkable, almost all the 544 woodcuts are in themselves interesting and also well drawn, some of them being of great elaboration. Almost the only desideratum is connected with the text, which would have been better if it had been less prolix; an opinion in which the English editor, judging from his remarks in the Preface, seems to have anticipated me.

\* \* \* The Institute is much indebted to Messrs. Chapman & Hall, the publishers of the English edition, for the loan of the blocks with which the above review is illustrated.



9, CONDUIT STREET, LONDON, W., 13 June 1895.

### CHRONICLE.

#### The British School at Athens.

At the Business General Meeting, held 10th inst., the President invited the attention of the Institute to an appeal now being made on behalf of the British School of Archaeology at Athens to the Prime Minister, with a view to obtaining for the School an annual grant of money. He held in his hand a paper which had been sent round to the Universities, the Public Schools, and to a great many influential persons for their signature; and he hoped, if the Meeting saw no objection to its being so done, that it would be sent in on behalf of the Institute under the Common Seal. The proposed Memorial, which the President then read, is as follows:—

*To the Right Honourable the Earl of Rosebery, K.G., First Lord of the Treasury, &c.*

We, the undersigned, desire to express our conviction that the British School at Athens has already done excellent work, and that its establishment upon a sound financial basis is of vital consequence to research in all branches of classical study. Athens is every year becoming more and more the centre of the archaeological world. The concentration in the Museums there of the numerous and highly important discoveries made of late years in Greece has made personal study in Athens indispensable to a complete training. These Museums contain an unequalled collection of materials for the investigation of prehistoric and early archaic Art. The architecture of Greece in all its periods can nowhere else be studied to such advantage. In the department of Christian antiquities, moreover, the student may find in Athens and elsewhere in Greece valuable openings for research.

For those who intend to take up archaeological work on Greek soil, it is obvious that the presence of a competent Director to guide the Student, and access to a good archaeological library, such as the British School has already acquired by gift and purchase, are absolutely essential. It is also clear that for those who, without any desire to become professed archaeologists, are qualifying themselves for educational work in our Universities and Public Schools, a season or two spent at Athens, with the advantages offered by the School, must be of permanent value.

That other nations recognise the importance of maintaining such a centre of work on Greek soil is evident from the fact that German and French institutes, amply supported by State endowments, have flourished at Athens for many years. The Americans also have a very successful School, which enjoys an income of £1,400 a year, contributed by sixteen Universities and Colleges.

It can hardly be the wish of Englishmen that the British School at Athens should be less efficient than the other foreign institutes, still less that, after nine years of good work, carried on with limited resources, the School should be closed for want of adequate financial support. And yet, with a precarious income of less than £500 a year, it cannot be said that this contingency is beyond the reach of probability.

It may be thought that the School might fairly expect support from the Universities, and, as a matter of fact, the University of Oxford has hitherto contributed the sum of £100 a year to its maintenance. It is, however, only too well known that the prevailing agricultural depression has of late years seriously crippled the resources of both our great English Universities as well as of individual Colleges, so that it is practically impossible for them to offer such support as they would undoubtedly desire to such an institution as the School at Athens. The smaller Universities, University Colleges, and the Public Schools have no funds at their disposal for outside purposes.

The effort to raise an adequate endowment by private subscription having failed of success, we, as representatives of the leading learned bodies and educational institutions in the United Kingdom, or as interested on general grounds in the progress of classical research, venture to urge upon Her Majesty's Government the claims of the British School at Athens to direct endowment by the State. If precedent is needed, it may be found in the annual grants recently made to University Colleges and to the Biological Laboratory at Plymouth, which bears to the study of natural science the same relation as the School at Athens bears to Classical Study. If an annual grant of £500 could be made to the School, the remainder of the income necessary to maintain it in a state of efficiency would no doubt be forthcoming from private sources. We confidently commend the case to your Lordship's most favourable consideration.

This School at Athens, continued the President, had been connected with the Institute on former occasions. When the Organising Committee were collecting the private subscriptions, with which the School had for nine years been supported, and when they had fifty of pounds at their disposal, they offered a Studentship to a man nominated by the Royal Institute of British Architects, and a very worthy young man—Mr. R. Elsey Smith [A.]—won it, and became the Greek Travelling Student for the year 1888. Another point which made it of extreme importance that some grant from the Government should be given was that it would place the British School at Athens on a national basis. They had heard of the injury lately done to the Parthenon by an earthquake. The French and German Schools, having been publicly recognised by their respective Governments, had had the whole say and consultation as to what should or should not be done in the matter; but the English School had not been approached or consulted in any way; whereas, if the School had had Government recognition, there was no doubt that the English would have been consulted on equal terms with their colleagues of France and Germany. There was no hostility between the Schools; on the contrary, they worked harmoniously together. The French and German Schools, and the American, were on extremely good terms with the English. But the last was

sadly hampered by poverty, and therefore Mr. Penrose hoped that the Institute would as a body support the appeal.

Mr. H. H. Statham [*F.*] then rose, and, as a matter of form, he said, seconded the President's proposal. He was doubtful, however, of success on account of the traditional indifference in England to bestowing Government money upon any archaeological scheme; but it was their duty to do their best to put the matter before the Government, and he joined most heartily in an attempt to advance the objects of so important a national work as the British School at Athens.

The Meeting having unanimously agreed to the proposal, the Memorial will be executed by the Council on the 17th inst. and forwarded forthwith to its destination.

#### The Annual Elections.

Although the Annual General Meeting appointed eight Fellows and six Associates (in one or two instances without asking their consent) to act as Scrutineers to conduct the elections of the Council and Standing Committees for 1895-96, only five Fellows and six Associates attended on Friday the 7th inst., the day selected for the Scrutiny. The number of envelopes, containing the voting papers, issued reached 1,450, and of these 499 were returned—only one having been sent back, and because it reached the Institute some days too late. Of the 498, the Fellows returned 204, the Associates 280, and the Hon. Associates 14. In the case of the Council election, the Scrutineers rejected 8 papers for Vice-Presidents, 12 for Members of Council, and 6 for Associate-Members. The numbers rejected as invalid by the Scrutineers in the case of the Standing Committees were not reported. The Scrutineers who acted, and to whom a hearty vote of thanks was recorded last Monday, were Messrs. Burmester, Jarvis, Searles-Wood, Seddon, and Woodthorpe, *Fellows*; and Messrs. Brodie, G. Hamilton Gordon, Greenaway, Niven, Satchell, and M. Wonnacott, *Associates*. They met at 11 a.m., and the majority did not separate until half-past seven.

#### Admission Fees to the Examinations.

The Council have decided to raise the fees paid by applicants for admission to the respective Examinations ultimately qualifying for candidature as Associate. After the 31st December of the current year, the fee for the Preliminary will be two guineas (instead of one guinea as at present), for the Intermediate three guineas (instead of two), and for the Final four guineas (instead of three). These make a total of nine guineas for the Examinations alone, but three of the nine will be carried forward as the candidate's entrance fee to the class of Associates should he be elected within eighteen months of the date of passing the Final Examination. No Probationer and no Student

registered as such prior to the close of the current year will be required to pay the increased fee for admission to the Intermediate and Final Examinations respectively.

The fees for the Special Examination qualifying for candidature as Associate have also been raised. In the next Examination, to be held in November or December of the current year, applicants will have to pay a fee of three guineas for the Examination alone, and should they qualify for candidature as Associate they will be required to pay the entrance fee of three guineas when elected. Again, the Board of Examiners have recommended that, after a certain date (not yet fixed) the admission fee to this Special Examination shall be six guineas instead of three—thereby making the total fee for entrance to the class of Associates by specially exempted candidates equal to that to be paid after the close of the current year by candidates who have gone through all the Progressive Examinations.

#### Allied Societies : Certificates of Alliance.

The Council, at their meeting of the 10th inst., signed and sealed Certificates made out in the names respectively of the fifteen non-Metropolitan Societies within the United Kingdom, allied to the Institute; and these will be forwarded to their several destinations at the end of the week. Such a Certificate of Alliance, asked for, at the close of last year, by Mr. Horbury Hunt, President of the Institute of Architects of New South Wales, was duly executed and forwarded to Sydney, some months ago.

#### The Modified Reservoir at Philæ [p. 77].

Mr. Somers Clarke, F.S.A., who was a member of the Commission invited to visit Philæ and consider the best means of saving the island, has forwarded the following:—Last year an official announcement was made by the Ministry of Public Works in Egypt the importance of which to the artistic and scientific world cannot be overestimated. By it the Egyptian Government pledged itself not to overwhelm the island of Philæ and the Nubian valley, as had been originally proposed, but to carry out the scheme in a form very much modified. The important part of the announcement ran as follows:—"The Ministry, recognising the respect due to the reasons advanced, has endeavoured to reconcile the material interests of the country with those of science by submitting a modified scheme which has received the approval of the Government. This modified scheme consists in the construction of a dam at Assouan, having its crest at the reduced level of 106 metres—that is to say, 8 metres, or 26 feet, lower than that at first proposed. This will retain water sufficient for Middle or Lower Egypt, but not for both. It entails the submersion of only a portion of

"Philæ Island, containing the smaller monuments, "which could be protected by special works to be "planned in accordance with the wishes of the "learned societies, and it leaves the other "numerous Nubian monuments untouched." In February last representatives of some of the learned Societies were invited to visit the island for the purpose of seeing the level to which it is now intended the water shall rise, and to consider the best means of fortifying or protecting the parts of the ancient structures which will be submerged to a greater or less degree.

The dam will be built in the place which has been throughout preferred by the engineer as most suitable for such a structure, *i.e.*, at some distance to the north of the island of Philæ. It may be hoped that the wall will not be visible from the island; it certainly will not be very prominent. The waters of the reservoir, rising to R.L. 106 metres, will leave the Temple of Isis above them—and this is a matter of great importance, as had this building, which retains its roof, been submerged it must have died out slowly.

The monument of the greatest historical importance, the small structure of Nectambo II., at the extreme south end of the island, lies, unfortunately, so low that it will for a time stand in seven or eight feet of water, and the adjoining walls and colonnades will not entirely escape. The intention of the Ministry of Public Works is that every part of the substructures over the island shall be carefully examined, so that by filling in with concrete or by other expedients the stability of the superstructures may be insured, and this does not seem to be a matter of serious difficulty. The island, viewed from without, will, when the reservoir is not full, show little if any change. From within, whilst the monuments still remain, the surface of the island cannot fail to suffer to some extent. There is no reason to think that the sandstone of which the buildings are made will suffer. The quay walls by which the island is surrounded, which are of the same material, are submerged and again emerge every year, and have done so unharmed for 2,000 years past.

Though one cannot but regret, adds Mr. Somers Clarke, that the reservoir must needs be made at this particular place, one cannot fail to see that there has been a very real effort to do as little harm as possible to the historical monuments threatened by the original scheme.

#### The Art of Ancient Egypt Exhibition.

The Committee of the Burlington Fine Arts Club (17, Savile Row, W.), as the President informed the General Meeting of the 10th inst., have intimated to the Council of the Institute that they will be happy to forward admission cards for the use of students who may desire to visit the Exhibition of the Art of Ancient Egypt held at

the Club. Gentleman who may desire to accept this kind invitation should send in their names and addresses to the Secretary of the Institute as soon as possible; for the Exhibition, which is most instructive and interesting, closes on the 6th prox.

#### Visit of German Architects and Engineers [p. 505].

The *Deutsche Bauzeitung* of the 1st inst. gives an account of the recent visit to England of the Architects' and Engineers' Verein for Rhenish Prussia and Westphalia, whose headquarters are in Cologne, and others. The following translation is a summary of the article:—

Although the proposal to undertake a week's excursion to London at first met with disapproval, the idea was gradually taken up by the members of the Cologne Society and other Societies; so that on the 18th May fifty-two names of those intending to join the party were sent in to the Dom Hôtel. Thirty-three of these were from Cologne, four from Bonn and Düsseldorf, two from Aachen, Düren, and Münster, while Frankfurt, Coblenz, Andernach, Godesberg, and Oberkassel were represented by two members. Four of the party were guests; and the others belonged to the architectural and engineering professions respectively. The arrangements were carried out by the Directors of the Society and the Committee, consisting of Herren Bouressi, Schreiber, Siegert, and Unna. The members started on Sunday, May 19th, by an early train to Flushing. The passage to Queenborough was stormy, cold, and disagreeable. The journey, however, in two of the reserved saloon carriages of the London, Chatham and Dover Railway, was pleasant.

On Monday a trip was made on Cook's omnibuses through the City and West End as far as the Albert Memorial, and a visit was paid to the South Kensington Museum, and afterwards to the gigantic Olympia Theatre at Addison Road. In the evening Herren Heimann, Kaaf, Mewes, and Stübben, and eight others, were entertained at dinner by the Council of the Royal Institute of British Architects. About fifteen English professional colleagues sat down to dinner, which followed a Council Meeting of the Institute, when Mr. Penrose, the President, briefly proposed the health of their German guests and the Society of the Niederrhein; and when in reply Herr Stübben pointed out that, besides there being an artistic relationship between the two nations, both came from the same stock, there was a display of enthusiasm. He thanked his English colleagues for ready support in arranging and carrying out their programme, and presented to the Royal Institute, in the name of the Society of Cologne, two volumes, *Köln und seine Bauten* and *Kölner Thorbürgen*. His speech was at various times accompanied by loud cheers, and especially as he brought it to an end in English. Mr. Penrose responded to his good



wishes for the Anglo-German contingent in the heartiest manner. Through the ready medium of the German Embassy, the gates of the great arsenals of Woolwich were opened on Tuesday to the travellers, who were shown round by several competent officers. Returning to London by steamer, a visit was paid to the Tower and the new Tower Bridge. Then followed an excursion to the British Museum; and the evening was spent at the Empire Theatre.

On Wednesday most of the party visited Hampton Court Palace, Richmond, and Kew, inspecting the numerous pretty villas in the vicinity. Two smaller parties visited respectively Oxford University and the cathedral of Winchester. Oxford, with its numerous colleges, which for the most part were monasteries originally, and which they resemble in many respects even to-day, with its picturesque old cloisters and capacious court-yards, its halls, chapels, and churches, with the charm of its mediæval streets, will be a constant source of delightful recollection. On Thursday, again through the influence of the German Embassy and Royal Institute of British Architects, the whole company of fifty-two were received at the north entrance of Westminster Hall by the Resident Engineer, and by Mr. Jones, the Clerk of Works, and escorted through the Houses of Parliament, the heating, ventilating, and electric appliances of the building being very thoroughly explained. After luncheon the party proceeded to Westminster Abbey, where they were met by Dr. Troutbeck and his daughter, Georgina, who was as good a linguist as she was amiable and charming. In the Society's name Herr Stübben in a brief speech placed a wreath of fresh laurels from which hung ribbons of black, white, and blue, and bearing an appropriate inscription, on the tombs of Robert Stephenson, of Charles Barry, George Gilbert Scott, and George Edmund Street, and also a wreath on the monument to Isaac Newton. As a sixth wreath was lacking, the visitors placed some loose flowers and their visiting cards at the foot of the statue of James Watt; while Herr Thomstzek, from Bonn, expressed in a brief but impressive speech his respect for the renowned engineer. The homage paid to the tombs of the various kings and queens was small compared with that—which was absolutely spontaneous—shown to England's great men in art and science, although, be it said, they were quite carried away by the great roll of celebrities. The visitors expressed their thanks to Miss Troutbeck, Herr Unna presenting her with a copy of *Köln und seine Bauten* specially inscribed and beautifully bound. Meanwhile the Royal Institute of British Architects had arranged for an intelligent guide to be at the principal entrance of the Law Courts in the Strand, to take them over this extensive group of buildings. Obviously, the most artistic feature is the large entrance hall, in

which is erected a fine statue of the architect, the late George Edmund Street. Punctually at five o'clock the company was received in person at the west entrance of St. Paul's by Mr. Penrose, who accompanied them and explained everything of interest in the cathedral. In the crypt Herr Stübben placed a last wreath on Christopher Wren's tomb, addressing a few words of hearty thanks to Wren's worthy successor.

On the Friday the party divided and went off in different directions. The electric underground railway and its construction, the sewer outfalls and drainage at Barking, the Tilbury Docks, Windsor Castle, and the famous abbey of St. Alban's were visited by the various parties. In one of the docks lay the *Spree* (Lloyd of North Germany), under repair: this magnificent vessel was most courteously shown to the visitors by Captain Wilhelm Meissel. The party painfully realised that there was no harbour in Germany that possessed a dock sufficiently large to repair a vessel of the dimensions of the *Spree*, the only dock of this kind being under construction at Bremerhaven. Later, the evening was spent by some at the Crystal Palace at Sydenham, by others at the British Museum, and at the Imperial Institute.

For the last day (Saturday) it had been arranged for the whole company to go to Canterbury. The majority, however, preferred to remain in London, as, though they had seen so much that was worth seeing, there was still so much to see. The others on their arrival at Canterbury Station were most agreeably surprised to find the Secretary of the Royal Institute of British Architects awaiting them. Mr. White, commissioned by the Institute, had started the previous day to make arrangements for their visit to the cathedral, to escort them over it, and look after their comfort. The inspection of the cathedral and its environments occupied over two hours, while two other hours were spent in walking round the picturesque old town. *Finis coronat opus*. Both the town and cathedral made a lasting impression upon the visitors. Still more charming was, perhaps, the environment of the cathedral, with its old cloisters, chapter house, and some portions in ruins shaded by huge trees overgrown with creepers and a profusion of flowers. Everywhere between the tops of trees and green leaves lay lovely views of architecture in endless variety, one view excelling another in a most astonishing way. The heartiest acknowledgment was made to Mr. White for his assistance; and mention must not be omitted of the exceptional interest our English professional colleagues have shown in the work of our German Society, especially its publications. *Berlin und seine Bauten*, Dresden, Hamburg, Frankfurt, Köln, Leipzig, *Strassburg und seine Bauten*, &c., have received unanimous recognition; nay, the English have notified their intention of following the example of the Germans.

A supper in the upper large room of the Criterion terminated the visit to the English metropolis, which had taught much and left much to remember. It was the Queen's birthday; and, as some member exclaimed, "God Save the Queen!" all present rose from their seats to join in the singing (the melody, as is well known, being the same as that of the Prussian Hymn), when it was felt that they were descended from the same race of people, as well as professionally related.

A delightful passage on a smooth sea and under a cloudless sky brought the party on Sunday, the 26th May, back to the Continent and, in due course, the Rhine.

#### "Drain" or "Sewer"?

The question when a drain ceases to be a "drain" repairable by the house owner or occupier, and becomes a "sewer" vested in the local sanitary authority, has been much before the Courts of late; and if certain magisterial rulings may be reckoned as good law, the effect will be to increase enormously the responsibilities of sanitary authorities, and cast a considerable burden upon the rates. A case in point is that of *the Vestry of St. Leonard's Shoreditch v. Hyde*, decided by Mr. Bushby on the 2nd ult. The magistrate doubtless was bound by the decision of a superior Court in the case of *Travis v. Utley*, in which it was laid down that a drain running under the basements of three adjoining houses, and carrying the refuse matter of all three houses into a public sewer, is a "sewer" within section 4 of the Public Health Act 1875, and vests in the local sanitary authority. This decision, however, has been more than once questioned, and it would seem to be necessary to either review or overrule it, or obtain legislation to save local authorities from the costs of unexpected miles of sewerage cast on them by judicial construction.

#### Additions to the Library.

*Acoustics in relation to Architecture and Building*, by Professor T. Roger Smith [F.], has been presented by the Publishers [Crosby Lockwood & Son]. This is a new edition of the Professor's well-known work; the text has been revised by him in a few places, and additions made touching recent appliances for the transmission and development of sound, and the remedying of acoustic defects in existing buildings. Otherwise the text remains as in previous editions. *Drainage Work and Sanitary Fittings*, by William H. Maxwell [London: The St. Bride's Press], has been prepared chiefly for the use of students, with the object of bringing together in a condensed and handy form the main points connected with the construction, examination, and testing of drainage works.

*Bye-way History, or Short Studies of Out-of-the-Way Places*, is the general title of what promises to be a useful and interesting series of

Papers [London: B. T. Batsford]. An excellent start is made with *Blethingly*, by J. Tavenor Perry [A.], a pamphlet containing 27 pp. of matter plentifully illustrated by the author, from whom it has been received. *The Buildings of the Holy Sepulchre*, by Geo. H. Jefferey, contains six measured plans and sketches illustrative of the architectural history of the buildings of the holy sites. The plans, made from actual measurement on the spot, have been designed more especially for the purpose of illustrating the accounts of the buildings in the various Pilgrim Books of the early ages of Christianity, and are described by extracts from the best-known pilgrim accounts, with which, Mr. Jefferey states, the drawings agree.

Mr. Thomas Gildard, Hon. Member of the Glasgow Architectural Association, has presented *An Old Glasgow Architect on Some Older Ones*, being the subject of a Paper read by him before the Architectural Section of the Philosophical Society of Glasgow on the 3rd December last, and now published in pamphlet form from the *Proceedings of the Society*. *A Table of Oligocene, Eocene, and Cretaceous Strata* is the title of a pamphlet prepared for private use by Mr. Frederick Meeson, architect, District Surveyor for East Hackney North. *Archæologia Oxoniensis*, Part V., presented by the Publisher [London: Henry Frowde], contains the following Papers: The Architecture of the Bodleian Library and the Old Schools, by J. Park Harrison; British Remains near St. Mary's Entry, by the Editor; Two Mediæval Cellars in Oxford, by H. Hurst; and Notes on recent Archaeological Discoveries. *The Bi-annual Report*, ending 31st December 1894, of work done and general information, &c., relating to the Public Works Department of the Johannesburg Sanitary Committee, by Charles Aburrow, has been presented by Messrs. Clowes & Sons. The *Memoirandum Judiciaire* of the Caisse de Défense Mutuelle des Architectes has been received from M. Charles Lucas [Hon. Corr. M.]. *The Twelfth General Report*, 1892 to 1894, of the Mitchell Library, Glasgow, has also been presented.

Mr. Falkener has presented to the Loan Library a copy of his well-known work *The Museum of Classical Antiquities* [London: Longmans, Green, & Co., 1860], and to the Reference Library a *Description of the So-called Tomb of St. Luke at Ephesus*, contained in a series of letters by G. Weber, with notes by W. Harry Rylands [H.A.], and a letter from the donor [London: Harrison & Sons, 1881].

Amongst recent purchases are Trendall's *Examples for Exterior and Interior Finishings*, in the Italian style of architecture [London, 1848], and the following Papers, which originally appeared in sundry magazines and reviews:—

New Courts of Justice Designs. (From *Belgravia*.)  
The New York City Hall, by Edward S. Wilde. (From *The Century Magazine*.)

Acoustic Architecture, by William W. Jacques, Ph.D. (From *The Popular Science Monthly*.)  
 Our National Monuments, by Joseph Anderson. (From *The Archaeological Review*.)  
 The Ethics of Architectural Competitions, by John M. Carrère. (From *The Engineering Magazine*.)  
 On the Distinction between Romanesque and Gothic, by Edward Bell. (From *The Archaeological Review*.)  
 Architecture in the West, by Henry Van Brunt. (From *The Atlantic Monthly*, Dec. 1889.)  
 The Profession of an Architect. (From *The British Quarterly Review*.)  
 The Protection of Dwelling-houses from Fire, by Eyre M. Shaw. (From *Murray's Magazine*, vol. iv. No. 19.)  
 A Colonial Monastery. (From *The Century Magazine*, vol. xxiii.)

#### A Proposed New Class of Members.

"Craftsmen" is the suggested title of a new class of subscribing members proposed to be established under the provisions of the second section of the Charter. The matter is to be taken on the 24th inst., after the presentation of the Royal Gold Medal to Mr. James Brooks. A Special General Meeting expressly summoned for the purpose will be asked to approve and adopt recommendations of the Council embracing both the establishment of a Class of "Craftsmen R.I.B.A.," and the By-laws necessary for defining the conditions of membership of the proposed class. The notice convening the Meeting, with full particulars, is given in the *Supplement* accompanying the present issue of the JOURNAL.

### REVIEWS. XXVII.

(77.)

#### A VISION OF GREECE.

*Greek Studies: A Series of Essays.* By Walter Pater, late Fellow of Brasenose College. Prepared for the Press by Charles L. Shadwell, Fellow of Oriel College, So. Lond. 1895. Price 10s. 6d. [Messrs. Macmillan & Co., 29-30, Bedford Street, Covent Garden.]

The prose style of the late Walter Pater is a thing by itself—unique. Why this should be the case it is not easy to determine, for the distinguishing characteristic of the style is so simple a matter that one would consider it the essential property of all writers—namely, the absolutely conscientious choice of the right word for every idea. I suspect, however, that it will be allowed by the readers of this remarkable writer that he establishes his conspicuous identity by two singular developments of this simple principle. In the first place, by the patient waiting for, and final selection of, the one very word suitable to his need in any moment of expression, he sometimes—not very often—drops into his sentence one of those uncouth sounds which it is the aim of most masters of style to avoid, as obstructing the rhythm, and thus checking the smooth intelligibility of a phrase. In other words, while well-balanced utterance and the bringing together of beautiful sounds

are much to him, they are not as important as the choice of the exact symbol that will clothe his thought. For the other characteristic, one observes that, either purposely or by the automatic eccentricity of genius, he was wont to push into a sentence a greater variety of thoughts than is the custom with ordinary writers. This peculiarity has at times an untoward result upon the reader, who may, through sheer inability to direct his brain rapidly into fresh directions, miss the fulness of the writer's thought, or read like a sleeper. With common writers a sentence encloses an idea, a proposition, a statement; the words are half guessed from one another, while the natural and expected sequence gives time for the infusion of the thought. With Pater it was otherwise—far otherwise: you start with him hand-in-hand down one of these pleasant paths of thought, in some region of historic twilight where his eyes seem to see more clearly than in the glare of common facts; you share his half-mystic reveries and seem to see with his eyes, when suddenly a word, a *secondary* word, an adjective maybe, or an adverb, opens with a clap the door of some fresh avenue of thought and experience such as in another writer would make half a page of "copy."

There is a world of charm in this, but with it a great bewilderment for the common brains of a high-pressure age. You cannot run and read such writing; you must sit to it, and sit calmly reading and re-reading. You must have read, too, in the past, and to some purpose, if you are to share half the delicate and remote allusions which are with Pater not the food of the discourse but the mere garnishings of the dish.

Not even when Pater read what Pater wrote was it possible to keep pace with the flock of thoughts that ran parallel in his reasoning. I remember well the meeting of a society in Oxford, called officially, I believe, the Oxford Art Club, but better known by a *sobriquet*. It was in Pater's college, Brasenose, and Pater himself was the entertainer, with a paper on *Love's Labour's Lost*—a perfect flood of rich thought and reminiscence, delivered in a gentle voice which those who have heard it must always recall as they read his pregnant sentences. To the majority of his hearers, listening to that paper must have been like drinking at a waterfall—a small gulp now and again, with the tantalising consciousness of the greater volume running to waste.

His mind was like some jewelled golden casket, inlaid not with gems merely, but with ancient gems, curiously wrought cameo and intaglio. In *Greek Studies*, a posthumous volume published by Messrs. Macmillan, and prepared for the press by Mr. C. L. Shadwell, it is proved that, had he wished it, Pater could have filled the rare office of a perfect architectural writer and critic. For various reasons, chiefly, no doubt, because "the world is so full of a number of things," it is not

to architecture that he gives the first place in any of his writings. That he could have done so, as few unprofessional writers can, is shown here and there in the book before me, as indeed in other writings, by flashes of description or analysis which, like a surgeon's knife, lay open the very secrets of architectural anatomy. Here is a definition of the so-called Cyclopean architecture: "buildings constructed of large, many-sided blocks of stone, fitted carefully together without the aid of cement, and remaining in their places by reciprocal resistance"—a definition which it would be hard to make either simpler or more perfect. Again, there is something very penetrating about the following: "Metal-like structures of self-supporting polygons, locked so firmly and impenetrably together, with the whole mystery and reasonableness of the arch implicitly within them." "Mystery and reasonableness of the arch!"—the phrase is as perfect as—an arch.

The book is not all concerned with art: some of the papers are on mythological and, one might say, spiritual subjects; but four of the essays are definitely centred on Greek art—namely, two on "The Beginnings of Greek Sculpture," and two others entitled "The Age of Athletic Prizemen" and "The Marbles of Ægina." As to the last, I can wish no one better than that he may avoid my own misfortune—to have visited the Glyptothek at Munich *before* reading it.

Pater may be all wrong—perhaps it is never of vital consequence whether a critic is right or wrong, for his function is not to inform—Pater, I repeat, may be wrong or incomplete in his estimate of ancient Greek motive; but, right or wrong, he gives a breath to the dry bones of any age he touches which, if not identical with the spirit of that age, is a thousand times more human and more real than the lethargic enthusiasm which most of us can evoke from the union of a Baedeker with a sculpture gallery. He admits himself that our effort of proper appreciation is "not always a successful one within the grey walls of the Louvre or the British Museum." He is concerned in this, as in all his works, to transport a reader, soul and body, into another world. It is a fair criticism that Pater himself has a rapidly expansive imagination, and that, to change the image, a very small anchor will hold him in a very deep sea. Read his *Imaginary Portraits*, a book whose title admits its fantastic nature, and you at once realise upon what slender facts or suppositions he can weave a romance and its environment. A bit of tapestry, a picture, a chance sentence, is a spur to his prose Pegasus, and he is at the gallop before you see him start. In fact one realises, without much regret, that as an imaginative describer he is as happy and as useful as in the sphere of facts. His imagination was glorious. In this very book the descriptions

of things which only exist in the pages of Pausanias or the poets are really more vivid, more vividly real, than his accounts of what anyone can see at Naples or Bloomsbury.

But he is no mere dreamer: fancy in him has not quenched thought, and he is concerned in these essays to show us that we may go widely astray in thinking of the Greek artist in too abstract, too metaphysical, even in too intellectual a light.

No one to-day pays much attention to the Lessing point of view—at least, in this country—but there is plenty of talk about Greek art, in which the talker loses balance, and cultivates the impression that the Greek sculptor was a soul and a chisel. Not so Pater. He is at pains to trace Greek sculpture from its proper origins, and to place it in its proper environments. In so doing he works out two distinct ideas among others: one, the growth of figure sculpture from the rudest symbolism—in fact, from the idol; the other, a more fascinating subject—the place of sculpture among other crafts. The prevalence of smiths' work in very early times, and the connection of art generally with metallurgy, is here brought out with a singular wealth of illustration and corroboration.

But you can't describe Pater's writing—it must be read. And he sits outside criticism, so that his reviewer can do no more than commend him in this last volume to those who know and like him as an old friend, to those who have known without liking him as an enigma they will never understand. He was one of our rarest thinkers and most cultured minds. A year ago he was one of the four greatest living prose writers, of whom only two remain alive. He must have been a good man; and finally—no small praise—he gave an added charm to whatever he handled. *Nihil tetigit quod non ornavit.*

PAUL WATERHOUSE.

(78.)

#### "SANCTA SOPHIA."

*The Church of Sancta Sophia, Constantinople: a Study of Byzantine Building.* By W. R. Lethaby and Harold Swainson. Super royal, Lond. 1894. Price 21s. net. Messrs. Macmillan & Co., Bedford Street, Covent Garden.

Humble apology is due to the Institute for this attempt on my part to formally present Messrs. Lethaby and Swainson's work to its notice. Never was a new book more persistently offered to competent reviewers for treatment, never was its review avoided with more persistence than this. Members who had known Constantinople well, and who had no occasion to fear a charge of envy, hatred, and malice either from a professional or a literary point of view, declined the task. One distinguished *raconteur* of the loftier sort wanted fifty guineas for "copy," which I, well knowing that contributions to this JOURNAL could not be



paid for in coin, was reluctantly compelled to refuse; another member had reviewed it elsewhere; a third would have at once removed me to a remoter sphere, for venturing to ask him to do it, and said so in terms of popular iteration. Happily Mr. Brindley has contributed a technical notice of some of the chief glories of St. Sophia, and no one is better able to treat the subject than he. But if the general contents of this book are to be noticed here, there is only myself to do it, and that in the capacity of a free and independent member of the Institute. The fact is the more depressing because I have spent only a week in Constantinople twenty years ago—in Pera too, and not in Stamboul—obviously a shorter period than the authors of *Sancta Sophia* devoted to a practical study on the spot of the renowned edifice. Moreover, I then came fresh from Ahmedabad and Delhi, where domed mosques and tombs abound; from the white marble of Jeypore and the red sandstone of the North-West Provinces, made doubly brilliant by a sun such as never illumined the ugly exterior and ungraceful minarets of St. Sophia, nor even the “denuded Parthenon,” of which the authors write with a kind of concealed groan, nor the Temple of Ephesus, of which they judiciously say very little.

The book in its first four chapters is mainly quotation, Englished by the late Mr. Swainson, topographical, historical, archaeological, and descriptive. The fifth chapter is on the ritual arrangements and the several divisions of the interior of the church; the second part of chapter vi. on its lighting; and the seventh chapter continues its history. Chapter viii. refers to Fossati's Reparations, which began in 1847, and is admittedly an abridgment of Salzenberg's text, with a description of the plates in his well-known work. Chapter ix. treats of the ancient precincts and external parts of the church. Chapter x. is on building forms and Byzantine, or rather Eastern, builders, and here and there it is enlivened by such art-exuberance (p. 199) as the following sentence discloses: “In the modern sense the Romans may ‘be said to have invented building, and the Byzantine-Greeks architecture.’” \* This, however, is almost immediately contradicted (p. 205) by a quotation from M. Choisy, who is made to state that “in Justinian's time to build was the essential rôle of the architect”; and as a matter of fact M. Choisy is the authority on which this tenth chapter is put together. The authors' admiration for the personality of the Byzantine workman,

which, they say, is often delightfully expressed, may be seen in the statement (p. 207) that “a ‘Byzantine brick in the British Museum is stamped ‘XP. made by the most excellent ‘Narsis,’ and a late Roman glass cup bears the legend ‘Ennion made this, think of it, O ‘buyer’;’ and reading it one's soul rises to the prophetic! Imagine some inspired Australian writer, a thousand years hence, who discovers in the Adelaide Museum a petrified cake of English soap stamped ‘Pears. He will not be happy till ‘he gets it!’ and a late English sanitary vase bearing the legend ‘George Jennings.’ None can deny that those enterprising makers have done their best to spread the trade-gospel of ‘Think of it, O buyer.’ But comparisons are odious. The eleventh and twelfth chapters, like the greater portion of the book, are of undoubted value to those Englishmen who can read neither French nor German.

The “Preface,” from beginning to end, is a study in sublime self-consciousness set up in italic. Karnak, the Parthenon, St. Sophia, and the Cathedral of Chartres, Amiens, or Bourges (the reader takes his choice) are therein called “the four great pinnacles of architecture.” The world is also congratulated on the happy fact that St. Sophia was situated in Constantinople and not in the more learned cities of Rome, Aachen, or Oxford, during the period of revived interest in ecclesiastical antiquities; and the first paragraph finishes with a reference, out of which something is to come hereafter, to the “Byzantine theory of ‘building.’” How the book was made forms the burden of the second. The late Mr. Swainson did “the larger part of the reading and the whole of ‘the translation required;’” Mr. Lethaby “more ‘of the constructive side [whatever that may ‘mean] of the book, and the whole of the illustrations.’” And, as if to disarm criticism of even its feeblest weapon, the public are assured that “Mr. Ambrose Poynter has read the proofs.” The fourth and final paragraph is perhaps the most instructive. Translated back into its original French, it would read very well, but the words in their English garb are exasperatingly fluent, and foreshadow, as it were, the contents of the work that follows. For the unfortunate quotation with which the Preface terminates, “L'art c'est d'être ‘absolument soi-même,” is a terrible indictment against the authors of a book the readable contents of which are solid quotations from Procopius, Paul the Silentiary, Salzenberg, M. Choisy, and a host of other writers, great and small, rather than the work of Mr. Lethaby or his talented colleague, the late Harold Swainson; while the illustrations are mostly tracings from other men's drawings. Indeed, they state that they have thought it well to incorporate the actual words of the writers to whom they have referred—meaning, of course, the English equivalents.

\* It may be consolatory to the surviving author of *Sancta Sophia* to state that an authority in “Art” greater than he has written that “Building is the erection, Architecture the adornment, of an edifice.” No wonder, after such teaching, the public believe that architecture is a mere matter of draughtsmanship, and that Universities have a course of “Architecture” distinct from another course of “Building Construction”!

Historical Monuments, seen for the first time, arouse, it is well known, certain emotions; and these are necessarily influenced by the facts and traditions connected with such monuments. Crossing the river, by the railway-bridge, into Agra or Delhi the mind becomes inflamed with the wonderful stories of Moghul emperors; and as one looks at the pretentious palaces of Lucknow feelings of sadness, often of horror and disgust, are dominant. The first view of the Acropolis of Athens from the Piræus is inspiring, but when on the Acropolis itself any sentiment evolved from the sight of the remains—the Propylæa always excepted—is tinged with recollections of “Stuart and Revett,” and of the hundred and one elevations of the Parthenon made by French students, all of which have led one to expect more from the reality, especially in effect of colour, than is apparently forthcoming. I confess that when I paid a first visit to St. Sophia the feeling uppermost within me was one of dismay at the vulgarity with which the Turk had desecrated it; but even his presence could not efface the respect every constructor must feel for those who poised the dome on a ring of window-lights. I confess that, in St. Peter’s at Rome, more emotion was aroused by the worn toe of the ancient Roman statue that passes for St. Peter than by the whole of Bernini’s colonnade, or the dome which is honestly put together and scientifically balanced, and, unlike many other domes, gives light to the interior. But no Englishman’s heart ever beat quicker because of a temple dedicated to all the Pagan gods. Yet the feelings of awe and humility that arise during one’s first few steps into the Pantheon who can ever forget? “See Naples and die” is still a hackneyed cry. See the Pantheon and realise the pettiness of modern construction! For what architect, what engineer, who has any knowledge of the great monuments of ancient times and of to-day can look up into that marvellous vault without a sense of baffled inquiry and beaten aspiration! Yet this same Pantheon, if one may so interpret the authors of *Sancta Sophia*, is not one of “the four great pinnacles of architecture.” Though they hope to find “the root of architecture once again in sound common-sense building,” it is not in such works as the Roman Pantheon that they would seek it, but rather at Karnak, at Athens, at Stamboul, and at Chartres.

And now for the “Byzantine theory of building,” a good text out of which sermons in stones may be evolved such as the latest and best-intentioned eulogists of St. Sophia—its noblest practical outcome—have apparently not realised. Now for “sound common-sense building” and the “root of architecture” to be found therein. Given an ancient civilisation of vast extent, dead here, decaying there, devoid of physical force everywhere, and recognisable only by the multitude of its monuments, some intact, others injured or

partially destroyed, all unguarded and most of them disused—a calamity which happens in due course to every great nation or Imperial group of peoples. Then, and in no poetical sense, but sadly prosaic in its realities, “all save the spirit of ‘man is divine.’” But slowly, and with many a contortion, many a yawn, this same man throws off the sleep of ages and awakens to a sense of the treasure he possesses, of the wants he begins to understand, of the means to the ends he would attain. In his midst are ruins of vast edifices, some still standing among heaps of stones hewn and carved, of sculptured capitals and friezes, of monoliths of porphyry and marble, while his own shelter affords him little protection either in cold or sunny weather. What happened? As time went on he gathered up the smaller fragments and arranged them perhaps upon the foundations, still intact, of an ancient dwelling; and as he gradually acquired a knowledge of the uses to which he might apply this and that fragment, he insensibly produced something that learned men of two hundred and more years ago dubbed respectively Byzantine and Romanesque. One may be sure, though, that the Byzantine-Greeks, as the authors of *Sancta Sophia* are pleased to call them, did not start afresh, did not root up the existing foundations of an ancient edifice, or even pull down walls of which they were too glad to make use, but diligently built upon them, and arranged the plan of a palace or a church as they went on and as circumstances demanded, adding a cross-wall here and there to divide it into halls and chambers, or building out a tomb which was to be the rendezvous of pilgrims, and ultimately develop into a shrine or chapel. An old monolith broken in two became a single column by the addition of a block or an annulet; and, if not long enough then, two old capitals were put upon it, so that it might match in height another which was next it. Hence it may be said that the Byzantine theory of building was based upon a copious supply of old materials which were put together by rule of thumb and untutored common sense. And such was the practice, not in Byzantium alone, but in Syria and the Orient generally, as existing remains suffice to prove. It was a Renaissance of solid materials, which has been repeated from time to time in India, the last effort of the kind having occurred when the Moghuls conquered Hindustan and built their mosques and palaces with stones torn from Hindu edifices, and by the enforced labour of Hindu workmen. The same thing occurred all over the Roman Empire of the West; and it was repeated during the ninth, tenth, and eleventh centuries all over Western Europe. Strange as the paradox may seem, it is by destruction and modification akin to destruction that architecture has always developed and progressed. By resuscitation and evolution—and only by such means—it has survived as a living art. The Renaissance

of the fifteenth century in Italy and that of the sixteenth century in other parts of Western Europe began on the old lines of destruction and modification, with the result that the buildings extant of those early Reformation times are still delightful to study, partly because of the *naïveté* or naturalness, or, in other words, the common sense they display—at least to the student who knows where to look for it. Architectonic evolution has followed in principle the evolution of its maker, Man. To quote Darwin: "From the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows; . . . from so simple a beginning endless forms, most beautiful and most wonderful, have been, and are being, evolved." In like manner the great church of St. Sophia rose to be the beautiful edifice it is, and no one can tell how many monuments of Grecian genius and of Roman power and wealth were ransacked or destroyed to make it grand and glorious.

No such happy or unhappy possibilities can occur in these days, when to pull down, to restore, even to repair the most trumpery work of five hundred or even fifty years ago is regarded as an atrocity of almost Armenian tinge. What Londoner past fifty can forget that glow of enthusiasm with which the City Fathers received an assurance at a civic entertainment from a Minister of State—I think it was Earl Russell when he was Lord John—that Macaulay's New Zealander was a mythical absurdity. There never could be, he said, "a broken arch of London Bridge" from which the ruins of St. Paul's might be sketched, because at the least sign of decay the authorities would repair it! I have, however, grave doubts on the subject, for as the culture of the Picturesque develops, who shall say if the City Corporation will be permitted to repair Sir John Rennie's excellent work? Why not allow London to be adorned with a broken bridge for Australasian and American, aye, and British artists to sit upon? True, a bridge is still wanted in that position for traffic, in spite of the new Tower Bridge; but then it is easy to build another alongside, and that without desecrating an old monument by restoration! Absurd as it is, the principle I am attempting to apply, for the sake of argument, is the principle which guides a part at least of the modern world in its treatment of a ruin, and its collateral craving for prettiness. Had such a principle been recognised by the scientific master-workmen of Pericles, three out of the "four great pinnacles of architecture," classified in *Sancta Sophia*, would never have attained perfection; and it is pleasant to remind Mr. Lethaby, and the ardent devotees who think with him, of an undoubted fact. Had no destruction and no modification akin to destruction been permitted in the past, there would have been no Parthenon, no St.

Sophia, and no cathedrals at Chartres, Amiens, or Bourges, such as now exist for the delight and instruction of living men.

WILLIAM H. WHITE.

The authors of *Sancta Sophia* have conferred a great boon upon archaeologists in bringing together the various works on the subject from the earliest times down to the present day. These, originally written in different languages, are all translated into English, analysed, and compared for us with the existing building, together with the authors' notes and remarks: for this they are fully entitled to the thanks of all lovers of Byzantine art. As the authors do not profess to have exhausted the subject, let us hope that Mr. Lethaby, if only as a tribute to the memory of his late dear friend and universally loved colleague, Harold Swainson, may be able to further extend our scanty knowledge of the other early Christian churches, now mosques, in Constantinople. Failing this, perhaps their work may influence others to continue the subject. The motive of the writers is to work up, through the early history of this church, first, the reader's enthusiasm for the edifice, then picture to him by description its wonderful past and existing beauties, and afterwards prove that all this was obtained at a minimum of cost.

Those unacquainted with Mohammedan countries have little idea of the difficulties a Christian writer experiences when he attempts to take measurements and make drawings of an important Turkish mosque like St. Sophia. As far as my own experience goes, I did succeed, with the aid of liberal "baksheesh," in making a few sketches, but utterly failed to get the carpets raised to enable me to see the marble pavements beneath.

The great lesson to be learned from the interior of this church is the sumptuous and harmonious effect of colour, for there is no single portion which comes forward to destroy the size of the building. The coloured marbles are rich and retiring; the white, carved lace-like, have a mosaic effect, without any broad, unequal masses of light and shade; the domes and the soffits of arches in small tesserae produce a heavenly vaulting. All this durable effect is obtained at a comparatively trifling cost by the studied economy of both labour and material, while the plan is such that the whole of the vast interior is seen at a glance; and when the carvings were gilt the effect must have been even grander than now.

*Building Procedure.*—The authors remark, "The first thing necessary was to collect marble monolithic shafts." On the subject of columns I venture to offer the following remarks, which were written previous to reading the authors' opinions. It may be found that Roman architects when designing were considerably influenced by the kind of monolith columns likely to be at once

obtainable, as the different quarries were situated in very remote parts of the empire. If an architect had to depend on columns being quarried after he had designed them, the chances were, considering the uncertainty of solid rock and the immense difficulty of land and sea communication, that he might have to wait years for them; and, being so essential to construction, no architect could run such risk. As the quarries were mostly worked by convict labour, and it would be necessary to keep the convicts going, it is reasonable to suppose that the quarry overseer would be safe in working monolith columns in groups of sizes as the quarry could produce them.

The writers believe that the bronze moulded annulets, nearly a foot deep, at the top and bottom of the marble shafts are part of the original design. This seems very doubtful; it is more probable that the shafts were worked at the quarries too small for the capitals, and that the bronze had to be introduced to assist the shafts to carry the weight. The sections of these, given in fig. 58 (p. 258), do not appear to be correct when compared with good photographs. The mention of shafts splitting under pressure holds good for laminated shafts, like cipollino, placed endways of the bed, but scarcely applies to those of the arcading; for, being wrought out of porphyry and breccia, the materials are as homogeneous and strong, one way of the bed, as the other. The twin shafts in the West Gynæceum have no metal bands, as these are the proper size for the capitals.

*Marble Masonry.*—One reads (p. 253): "The great capitals of S. Sophia are remarkable examples of the evolution of beautiful forms on the mason's banker; the workman finding form in the stone block by the application of practical methods." Now the bulk of the carved patterns, one may say, do certainly imply "Art and Craft," for, although extremely beautiful, they are the essence of simple mannerism, being such that one master-artist might have drawn full size for the whole of the interior; and which might afterwards be transferred by cut stencil patterns on to the cushioned form, for the mason carver—the angular shadows then being cut deep, and the surfaces of leaves being fluted afterwards.

As regards skilled workmanship in the cutting and carving of marble, there cannot be any question that the Roman work of the first two centuries is infinitely better than that of the Byzantine. The Roman carver, like the Greek, boldly and deliberately, with his hammer and chisel, sculptured away his waste material, producing afterwards with his drill the deep ploughed furrows in the folds of drapery, and stems of his acanthus leaves and "echinus." There can be little doubt that the art of sculpture and carving had declined to a very low level at the date of Justinian, and that it must have been difficult for Anthemius to find marble carvers—in fact, he would have to make them out

of masons. This may in great measure account for the new style in carving, as unskilled men could not be turned broadcast on to these masses of white marble to produce what design they liked. The prevailing principle of the Byzantine was to get his lace-like mosaic effects on the cushioned surface by drill and chisel, so as to avoid as far as possible manual labour. Want of skill is still more apparent in hard material like porphyry, for, while the Roman cut this material, even in figure sculpture, like marble, the Byzantine produced very primitive work; and though the authors admire the play of light and shade on the shafts and irregular sawn slabs, yet, as regards workmanship, these shafts and slabs are worse than the Egyptian produced, some thousands of years earlier, in harder materials.

It would have been useful if we could have been told more about the pavement; all that is at present known of it seems to be learned from Salzenberg and others, as the authors appear to have seen it only "through the chinks of the matting," and pronounce it to be Proconnesian marble, whereas the weight of description given by the old authorities would imply greyish-green Carystian. The patterns of Opus Alexandrinum work, as shown in Salzenberg, being precisely the same as are found in the Basilican churches of Rome, it would be interesting to know if this mosaic is really of the time of Justinian, or subsequent. The pattern of border round the square in the Western Gynæceum does appear to be as early as the building itself.

*Marble Quarries.*—The authors' remarks about the old quarries show considerable research, giving much useful information. The porphyry mountain, however, is erroneously stated to be situated 25 miles N.E. of Thebes; this should read 125 miles. Letronne, quoted as to transit of blocks, is only theoretical.\*

*Thessalian Green (Verde Antico).*—As probably quite seventy-five per cent. of the coloured marble used in St. Sophia and the other churches and mosques in Constantinople is of this marble, it may be useful to supplement the authors' information. This rock, although known to the Romans at a very early period, would not seem to have been worked to any extent before the time of Constantine or Justinian; there are eight old quarries showing the methods of working. The monoliths for St. Sophia appear to have been cut out of the vertical face of the rock, as a concave upright matrix shows. In one quarry there is still a sarcophagus block, ten feet long and five wide, worked all round, ready to be wedged up from the bottom bed. In another quarry there are actual sawn faces and "saw-curfs," showing

\* THE R.I.B.A. JOURNAL, Vol. IV. N.S. p. 47; "The Ancient Quarries of Egypt," TRANSACTIONS, Vol. IV. N.S. p. 5.



that some of the later masses were sawn out. This marble might be called a Byzantine one, as nearly all that is found worked, even in Italy, is of late date; and the bulk of the shafts have the projecting top and bottom mouldings added with joints.

*Lapis Lacedæmonius*.—This green porphyry is the same as that used in the pavements throughout Italy. It is only obtainable in small irregular lumps, and is quite different from any rock found in Egypt.

*Proconnesium*.—Much of the marble the authors so name may be found to be "Euboicum."

*Carystium* (*Cipollino*).—Probably this was the first coloured marble introduced into Rome. It was worked more extensively than any other; there were a great number of quarries, extending over a large tract of country, from Stoura to Carystus. These quarries produced the largest marble monoliths known.

*Marmor Phrygium* (*Pavonazzetto*).—Some of the marble so named may have come from the island of Skyros, especially when it has a "waxy" statuary ground. The Synnadic quarries were probably first used in Rome for the Pantheon. "Leonti," quoted, should be Leoni. He visited the quarries, making complete plans, and sent to London specimen blocks of every variety, which are identical with those in St. Sophia and Rome.

*Marmor Numidicum* (*Giallo Antico*).—This marble was most likely introduced into Rome about the same time as the Synnadic. The sizes obtainable were never very large, owing to the rocks having apparently been shaken by earthquakes.\*

It is worthy of note that the bulk of the marble used in St. Sophia and in Constantinople generally is local as regards the Mediterranean, and that no specimen has been found there of the beautiful Breccia Africano, so plentiful in Rome; probably these quarries were not worked after the fourth century. The authors are of opinion that the marble surfaces were "polished with wax en-caustic," and quote Vitruvius's oil and wax mixture. This could well be used for coloured marbles, but would disagreeably stain white ones. Instead of "oil" it would answer better to say "oil of turpentine." The illustration and description of the preliminary blocking out of capitals will be found very instructive, as well as the chapter on bronze and mosaic. Similar tesserae to those used in the vaultings are found in the temple of Pestum and the early Moorish work of Cordova.

The chapter on "Relics, Treasure, and Lighting of Church," charmingly illustrated, is delightful reading. The amount of general information given in the book is enormous, as it is condensed to the fullest extent. There are seventy-five illustrations; but if a second edition be published,

the value would be much increased if this number were considerably augmented. The index also might be made much fuller.

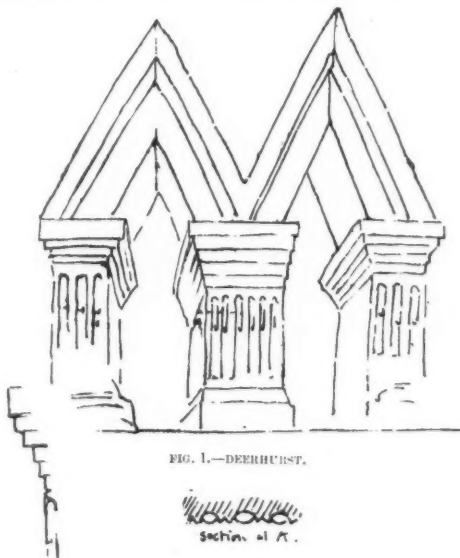
W. BRINDLEY.

## NOTES, QUERIES, AND REPLIES.

### Pre-Conquest Architecture [p. 485].

From R. PHENÉ SPIERS [F.], F.S.A.—

I find, on a more careful examination of my drawings and a photograph of the town of Earl's Barton church, that the pilaster strips, arches, and other decorative features of the walls there project more than the quoins; so that Professor Baldwin Brown's assumption that the wall surfaces were originally plastered, as actually found at Sompting, is fully borne out, and, it may be said, proved by the comparatively slight projection of the quoin stones. This plastering would also dispose of what seemed to be an anomaly in the projection of the bond stones of the long-and-



short work, whereby a narrow ledge was left without weathering. A few years ago I visited Sompting, and came to the conclusion that the gable terminations of the tower were of much later date than the tower itself, the long-and-short work in which terminates below them. The gable terminations in the spire seemed to be built in imitation of the Rhenish spires, and probably are of twelfth-century date. It would be interesting to know whether the framing of the spire was copied as well as the exterior design.

In suggesting the Byzantine influence, as evidenced by the polygonal apses at Brixworth and

\* For descriptions of these quarries see "Marble: Its Uses as suggested by the Past," TRANSACTIONS, Vol. III. N.S. p. 45.

Wing, I was referring to pre-Conquest examples. The apse of Heisterbach, mentioned by Mr. Slater, dates from the close of the twelfth century (1190). Long before that period Byzantine art had ceased to influence the plans of German, French, and English churches; it is only in the carving of capitals, stringcourses and decorative panels that we find a lingering fondness for the Byzantine interlaced ornament. Mayence, Treves, and Bamberg (east apse) have all polygonal apses—a form adopted quite irrespective of any Byzantine influence.

The straight-sided arch [fig. 1], composed of flat slabs leaning against each other at an angle, is a favourite Byzantine decorative feature, especially when found alternating with round arches. It forms the constant decoration of Byzantine sarcophagi, and in early buildings is found in St. John at Poitiers, in St. Genèroux (Deux-Sèvres), France,



FIG. 2.—PALACE OF THEODOSIUS II., CONSTANTINOPLE.

and in the Abbey gateway at Lorsch, Germany. Its earliest source was probably the alternating circular and angular pediments of the windows or niches of Roman buildings, and the earliest Byzantine example in a building was on the walls of the palace of Theodosius II. [fig. 2] (408-450), overlooking the Bosphorus, destroyed to make way for the new railway. Similar niche-heads with figures in them, which are found executed in plaster in the interior of the Baptistry at Ravenna, were probably copied from Byzantine ivory tablets: there is an example in the Museum of Bologna of precisely the same design. In the spandrels above the triangular pediment are birds, also found in all Byzantine designs. The west door at Barnack, Northants, has two birds in the spandrels above the arch, suggesting a similar influence.

#### The East End of Durham Cathedral.

From JOHN BILSON [F.], F.S.A.—

In the discussion which followed Professor Baldwin Brown's valuable Paper [p. 485], Mr. William

White, F.S.A. [p. 503], referred to the remains which have been uncovered by the recent excavations in Durham Cathedral, and expressed the opinion that they belonged to the pre-Conquest church built by Bishop Aldhune, and not to the Norman church of Bishop William of St. Carileph (1093-5). I do not know whether Mr. White has seen what has been found, but I cannot but think that a personal investigation on the spot would have led him to an exactly opposite conclusion. It is only right to say that Canon Greenwell's remark about the taking down of Aldhune's church by Norman builders was not advanced as an argument that the foundations are those of Carileph's church—a conclusion at which he arrived on quite other grounds.

The question is, I think, sufficiently important in its bearing on the history of the architecture of the Norman period to make it desirable that it should be definitely settled. The design of Carileph's work at Durham is, in many respects, so decidedly in advance of any contemporary work which remains to us, either in England or Normandy, that the recovery of the plan of the eastern part of his church becomes a matter of considerable interest, and adds an important item to our knowledge of the planning of the great churches of the half-century following the Conquest.

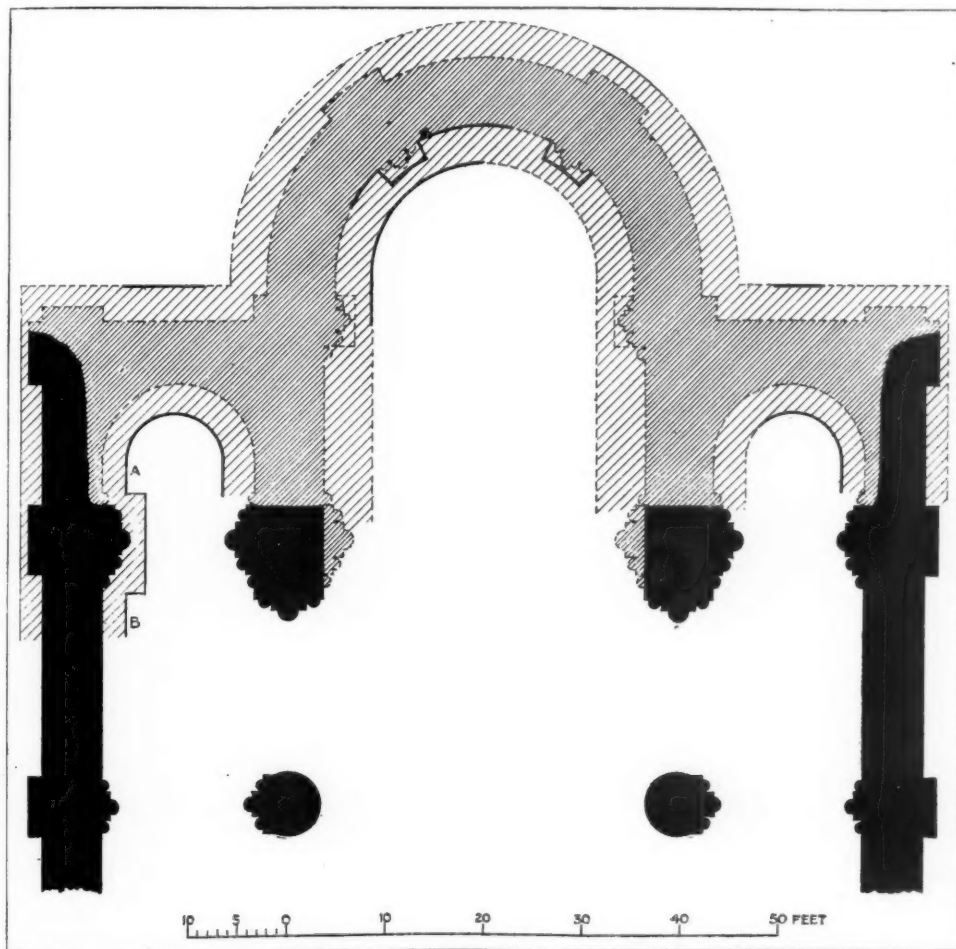
Mr. White says that he should like to base the history of what has been found upon architectural evidence. I propose to rely entirely upon architectural evidence. The accompanying plan [p. 542] shows the recent discoveries in relation to the existing Norman choir, omitting the eastern transept (or Nine Altars), and the eastern bay of the choir which was reconstructed in the thirteenth century when the eastern transept was built. The existing Norman work is shown in solid black, all to the east of this (except what has just been found) having been removed at the building of the Nine Altars. The lighter shading shows the plan of the foundations below the floor level, and the darker shows the walls above the floor. The parts which actually remain are shown by strong lines, as distinguished from those parts which are merely conjectural, shown by dotted lines. The wall-arcades are omitted, in order to avoid confusing the plan with unnecessary details.

Of the great apse which formed the eastern termination of the choir, the inner face was found to be standing, for a length of about 18 feet, to a height of two courses above the floor-level, the upper course being a chamfered plinth which formed the sill of the wall-arcade. In this length occurred the plinth of one of the shafts (or cluster of shafts) which divided the semicircle of the apse into three parts. The lower stone of the corresponding plinth on the opposite side was also in position. The remainder of the inner face of the apse and the whole of the external face had

been removed to make way for the Nine Altars work, but both the outer and inner faces of the masonry foundation below the floor level were exposed for a considerable distance. The base of one of the shafts of the internal wall-arcade of the apse was found in position, and proves that this arcade was of the same character as the

remain, and in both cases are apsidal on the inside and square on the outside. These apse foundations are not quite central with the aisles, a broader set-off being given to the (higher) choir wall than to the (lower) wall of the aisle in each case.

It has been suggested that these aisle apses are



PLAN SHOWING THE RECENT DISCOVERIES AT THE EAST END OF DURHAM CATHEDRAL.

wall-arcades in the choir aisles. There can, of course, be no doubt (and none has been suggested) that this apse was Carileph's work. It is central with the existing choir, and its floor level, plinth level, and base of wall-arcade all correspond with the existing choir aisles.

Of the termination of the choir aisles everything had been removed to some distance below the floor level. But the masonry foundations

part of the foundations of Aldhune's church, and that they belong to apsidal chapels on the east side of the transepts of that church. But this theory involves the supposition that Carileph's designer purposely laid down the plan of his entirely new building in such a manner that his choir aisles were practically central with the transeptal apses of the pre-Conquest church. He is thus assumed to have allowed the elementary

width of his new building and the position of his east end to be entirely governed by the width between the centres of the transeptal apses of the earlier church. And the only motive he can have had for tying his hands in this extraordinary manner was the retention of two quite inconsiderable fragments of foundation work, for only the apsidal inner face (and not the square outer face) was supposed to be Aldhune's work.

But since this theory was advanced, excavation in the north choir aisle has shown that the inner face of the foundation of the aisle wall [at B on the plan] is exactly in line with the inner face of the apse foundation on its northern side [at A]. I think this conclusively proves that both aisle and apse are part of the same work. So far as I understand, the reason why the side apse foundations were supposed to belong to Aldhune's church was that it was found difficult to account for their great thickness compared with the thickness of the Norman walls above ground. The difficulty disappears when we realise that it is a question of foundation work. The outer face of the foundation of the north aisle wall may be seen in the eastern bay, next the Nine Altars, and the inner face has been recently exposed by excavation. This foundation wall is 10 feet 10 inches in thickness, being made sufficiently thick to receive the projection of the buttresses and their plinths on the outside, and of the vaulting shafts and their bases on the inside. The thickness of the foundation of the apse at the end of the north aisle is 12 feet 11 inches, and that of the southern apse is much the same. The thickness of the foundation of the great choir apse wall has been ascertained to be about 14 feet 6 inches.

Whatever Norman foundations may be elsewhere, these excavations have proved that the foundations of Carileph's church were executed with the same care which characterises the whole of this admirable work. I have just referred to the width of the foundation. Their depth has only been ascertained in the case of the apse to the north aisle. Here the bottom of the masonry is 14 feet 3 inches below the level of the aisle floor, and the wall is built on the solid rock. It is clear, therefore, that the failure of Carileph's east end was not due to insufficient foundations. And, since we are dealing with a vaulted Romanesque church, it seems much more likely that the great apse failed because the vault was insufficiently abutted. There seems to be some evidence that the apse was vaulted by 1104, and, if the method of vaulting was as much in advance of the time as the aisle vaults undoubtedly were, we need scarcely be surprised at the failure of a groined apse vault constructed at this early date.

The exact detail of this eastern termination, and the precise manner in which the great apse was connected with the choir, must, of course, remain a matter of conjecture. Enough, how-

ever, has been found to show the general arrangement of the plan, which was much the same as that adopted at an earlier date at St. Alban's, and later at Peterborough, and probably Selby. Ruprich-Robert, in *L'Architecture Normande*, shows four plans of this type, Saint-Nicolas (Caen), Abbaye de Lessay (Manche), Saint-Georges-de-Boscherville (Seine-Inférieure), and Saint-Gabriel (Calvados). Ramée's plan of Saint-Etienne (Caen) and Willis's conjectural plan of Lanfranc's choir at Canterbury show a similar type of plan; but the choir aisles finish square both internally and externally, as in Ruprich-Robert's plans of Mont-Saint-Michel (Manche) and Cerisy-la-Forêt (Manche).

Joseph Bonomi, A.R.A., Architect, and his Son.

From WM. SIMPSON [H.A.], R.I.—

On the death of Joseph Bonomi, the well-known Egyptologist, once the Curator of the Soane Museum, the Council of the Society of Biblical Archaeology requested me, as we had been for many years intimate, to write a memoir of him.\* The family supplied me with a number of details, and the following relates to his father, who was an Italian. He had been for some time the architect to St. Peter's at Rome, but had been induced by James and Robert Adam, the well-known architects of the period, to leave Rome and come to London, which he did in 1767, when he was about twenty-five years of age. He remained for a considerable time in the employment of the brothers Adam, and married Rosa Florini, a cousin of Angelica Kaufmann. It was after this that he returned to Rome, where it was understood it was his intention to resume his profession; but the death of a child so distressed the mother that he came back again to England, and was very successful in his practice as an architect. The Sardinian Chapel and old Montagu House, in London, were erected from his designs; also Eastwell House, in Kent, where the Duke of Edinburgh at one time resided; Roseneath, on the Clyde, a mansion belonging to the Duke of Argyll, and many well-known country seats were done by him. He was a very intimate friend of Sir Joshua Reynolds, so much so that when the Royal Academy refused to elect him to the full position of an Academician—he had been made an Associate in 1790—the result was the well-known rupture which occurred between Sir Joshua and that body. He died in Great Titchfield Street on the 9th March 1808, and was buried in the Marylebone Cemetery, where, I believe, a Latin inscription still marks the grave of himself and his wife. His son Ignatius followed in his father's profession, and died in 1870.

The only work of Bonomi's that I have seen is

\* This memoir was published in *The Transactions of the Society of Biblical Archaeology*, vol. vi. part 2, 1879.



the house in which the two brothers lived—"The Camels," in Princes Road, Wimbledon Park. The internal arrangement of the house, I understood, was in many of its details according to Italian ideas. The only decorative portions of it were two bas-reliefs on the principal gable: these were executed by Joseph Bonomi the younger, and gave the name to the house from the "camels" upon them. These animals appear as the principal part of the design, but the two subjects in reality represent the riddle of *Œdipus*: on one the infant may be seen crawling on all fours, and on the other there is the old man leaning on his staff. Among the pictures at "The Camels" was a large coloured perspective drawing of the mansion at Roseneath—the design of the elder Bonomi. This had a particular interest from the tinting of it having been the work of Turner. It is the only specimen I have chanced to see of this phase of the many-sided character of Turner's work—that is, of washing in with water-colour an effect into architects' perspective drawings—which it is known he practised in his very early days before he was in a position to sell his pictures.

The career of the son, Joseph Bonomi, the Egyptologist, was intimately connected with architecture, particularly from his study of Egyptian architecture and sculpture. He was one of the early explorers of Egypt, where he remained for many years, dressed like a native, and living quite as the Arabs lived. He was born in 1796, and became in time a student of the Royal Academy. His tastes led him to sculpture, and he was placed under Nolken, with whom he remained till 1823, when he went to Rome to continue his study of sculpture. It was in Rome that he met Robert Hay, a naval officer, who prevailed on him to go to Egypt, where he remained for a number of years, working with Arundale and others for Hay. While at Medinet Habou, in October 1825, he mentions the arrival of his friend Burton—this was James Burton, not Richard, the celebrity of a later period—who was working on his own account, and who excavated the north-east wall of the great Temple of Medinet Habou in that year. In 1826 Bonomi separated from Hay, and joined Burton at Cairo, where they produced the *Excerpta Hieroglyphica*: this work, now a scarce book, was lithographed by them in Cairo under every disadvantage. In 1829 Bonomi went up the Nile as far as Dongola, measuring temples and copying inscriptions. In 1831 he made another journey up the Nile, and on this occasion he accompanied Linant—afterwards Linant Bey—in his expedition to the gold mines in the desert between the Nile and the Red Sea. While on this expedition Bonomi made an excursion into the Bishereen Desert. In 1832-33 he was again working for Hay in Cairo; at the end of 1833 he

started with Arundale and Catherwood for Sinai and the Holy Land. In this journey Bonomi copied many of the inscriptions in the Wadi Mokatteh, or "Written Valley," and made a plan with measurements of the Egyptian temple at Sarabat-el-Khadem. At that date no Christian was allowed to enter the Haram at Jerusalem, but this party managed to lead the functionaries into the belief that they were officials sent by the Sultan to inspect the buildings in order to have them repaired. Under this pretence they were able to make plans, sections, and drawings of details of the Khubbet-es-Sakhra, or Dome of the Rock, for the first time. This was mainly the work of Catherwood and Arundale, and it led to noted results, for it was on these drawings that Fergusson based his theory of the ancient topography of Jerusalem; and his book on the subject, published in 1847, was followed by a long controversy, which produced a number of works, all of them being more or less of an architectural character. By this time Bonomi had become so completely transmuted into an Oriental, in dress and otherwise, that he was able to pass into the Haram, muttering, as he entered, the Mussulman declaration of faith. In 1834 he visited Damascus and Baalbec, and returned to England. Between 1834 and 1842 he did some work in sculpture, visited Rome, worked for the British Museum, illustrated Wilkinson's *Manners and Customs of the Ancient Egyptians*, and was engaged with Birch and Arundale in bringing out a work called the *Gallery of Antiquities*. In 1842 he went again to Egypt with the Prussian Expedition under Lepsius, and returned to England in 1844. He married a daughter of John Martin, the celebrated painter, in 1845. When the Architectural Courts at the Crystal Palace were being produced he, with Owen Jones, did the designs for the Egyptian Court. It was in 1861 that he was appointed Curator of Sir John Soane's Museum in Lincoln's Inn Fields. Further details will be found in the memoir already mentioned—the volume containing it being in the Library.

I shall only add, as an incident showing how thoroughly Bonomi had transformed himself, that when Lewis Vulliamy, the architect, was travelling in Egypt, a person, to all appearance an Arab, asked him, much to his surprise, in perfect English, to come into a tomb to have something to eat, thus quite reversing Hamlet's definition of the grave. It was Bonomi, the Egyptologist; and this was the beginning of the acquaintance of these two men. I understand that most of Bonomi's drawings of temples, with plans, measurements, and notes, are in the British Museum. It should be mentioned that Bonomi had a very correct eye and an accurate touch, the result being that his drawings of Egyptian sculpture, hieroglyphics, &c., have not yet, so far as I know, been equalled.



## MINUTES. XV.

At the Fifteenth General Meeting (Business) of the Session, held on Monday, 10th June 1895, at 8 p.m., Mr. F. C. Penrose, F.R.S., *President*, in the chair, with 15 Fellows (including 8 members of the Council), 12 Associates (including 1 member of the Council), and 1 Hon. Associate, the Minutes of the Meeting held 20th May 1895 [p. 522] were taken as read and signed as correct.

The receipt of donations to the Library was announced, and an expression of thanks to the several donors was ordered to be entered on the Minutes.

The following members, attending for the first time since their election, were formally admitted and signed the respective Registers—namely, William St. John Hu Hancock (Hong Kong), *Fellow*, and James Roger Bramble, F.S.A., *Hon. Associate*.

The President referred to the British School of Archaeology at Athens, and read the draft of a memorial proposed to be sent to Lord Rosebery urging the claims of the school to an annual grant from the Government [p. 534]. Whereupon it was

RESOLVED, that the Council, on behalf of the Institute, do memorialise the Prime Minister in the terms of the Paper read to the Meeting.

The President read a letter from the Secretary of the Burlington Fine Arts Club containing an invitation to students to visit the Exhibition of the Art of Ancient Egypt now being held in the rooms of the Club [p. 536].

A motion by Mr. Octavius Hansard [F.]—That it be a recommendation to the Council to publish the names of the seven proposers of any name or names added by Fellows and Associates to the nomination list issued by the Council—seconded by Mr. Gruning [F.], was discussed and agreed to [Appendix A].

## THE ANNUAL ELECTIONS, 1895-96.

## THE COUNCIL.

The President then read the report of the Scrutineers appointed by the Annual General Meeting [p. 478] to conduct the election of the Council. The following were declared to be the results:—

**President.**—Francis Cranmer Penrose [unopposed].

**Vice-Presidents (4).**—Aston Webb, 461; James Brooks, 418; Ernest George, 408; Alex. Graham, 385. The following candidate is not elected:—Robert William Edis, 141.

**Hon. Secretary.**—William Emerson [unopposed].

**Members of Council (18).**—John McKean Brydon, 399; George Aitchison, 397; Richard Phené Spiers, 392; Edward William Mountford, 384; Arthur Cates, 376; John Alfred Gotch, 376; John Slater, 374; Thomas Blashill, 367; John Belcher, 366; Campbell Douglas, 364; Edwin Thomas Hall, 360; Thomas William Cutler, 350; Paul Waterhouse, 349; Arthur Edmund Street, 344; Benjamin Ingelow, 340; Edward Augustus Gruning, 334; Henry Louis Florence, 331; Charles Hadfield, 315. The following candidates are not elected:—Leonard Stokes, 385; Percival Gordon Smith, 243; Thomas William Aldwinckle, 240; William Young, 233; Ralph Selden Wornum, 218; William Warlow Gwyther, 146.

**Associate-members of Council (2).**—Thomas Miller Rickman, 236; Beresford Pite, 216. The following candi-

dates are not elected:—Arthur Smyth Flower, 139; Henry Thomas Hare, 119; William H. Atkin Berry, 109; Francis Thomas Wilberforce Goldsmith, 101.

**Representatives of Allied Societies (9).**—Alfred Culshaw (Liverpool Architectural Society); Edward John Dodgshun (Leeds and Yorkshire Architectural Society); Thomas Drew (Royal Institute of the Architects of Ireland); John Goodacre (Leicester and Leicestershire Society of Architects); William Henman (Birmingham Architectural Association); John Holden (Manchester Society of Architects); James Jerman (Devon and Exeter Society); Joseph Oswald (Northern Architectural Association); Thomas Lennox Watson (Glasgow Institute of Architects) [unopposed].

**Representative of the Architectural Association.**—William Douglas Caröe [unopposed].

[The above members declared to have been duly elected compose the Council.]

**Auditors.**—*Fellow*, Frederick Todd; *Associate*, William Woodward [unopposed].

## THE STANDING COMMITTEES.

The President read the Report of the Scrutineers appointed by the Annual General Meeting [p. 478] to conduct the election of the four Standing Committees. The following were declared to be the results:—

## Art Standing Committee.

**Fellows (10).**—Ernest George, 398; William Douglas Caröe, 388; Edward Ingress Bell, 376; John McKean Brydon, 374; Alfred Waterhouse, 372; James Brooks, 368; Edward William Mountford, 344; John Belcher, 342; Frank Thomas Baggallay, 310; William Young, 230. The following candidates are not elected:—William Henman, 215; William Samuel Weatherley, 180; Charles Harrison Townsend, 160; William Kidner, 145.

**Associates (6).**—Beresford Pite, 319; George Campbell Sherrin, 311; George Kenyon, 304; William Henry Romaine-Walker, 289; Henry Thomas Hare, 287; Alexander Nisbet Paterson, 282. The following candidates are not elected:—Stewart Henbest Capper, 239; Arthur Thomas Bolton, 204; Owen Fleming, 194.

## Literature Standing Committee.

**Fellows (10).**—Alexander Graham, 422; George Aitchison, 414; Richard Phené Spiers, 402; Arthur Edmund Street, 376; Paul Waterhouse, 375; Frank Thomas Baggallay, 373; Benjamin Ingelow, 369; Edgar P. Loftus Brock, 361; Sydney Smirke, 341; Frederic Chancellor, 280. The following candidates are not elected:—James Cubitt, 225; Edward Henry Martineau, 214.

**Associates (6).**—Arthur Smyth Flower, 377; Andrew Noble Prentice, 376; Leslie Waterhouse, 337; Percy Scott Worthington, 333; Ravenscroft Elsey Smith, 321; Banister Flight Fletcher, 216. The following candidates are not elected:—Alfred Henry Hart, 205; Robert Langton Cole, 202; Herbert Arnold Satchell, 182.

## Practice Standing Committee.

**Fellows (10).**—Edwin Thomas Hall, 353; Lacy William Ridge, 308; Samuel Flint Clarkson, 305; Thomas Battenbury, 282; Henry Cowell Boyes, 280; Joseph Stanislaus Hansom, 275; Walter Hilton Nash, 272; Edmund Woodthorpe, 265; George Enoch Grayson, 264; Edward Augustus Gruning, 261. The following candidates are not elected:—Joseph Douglass Mathews, 233; Thomas Harris, 206; Franc Sadleir Brereton, 197; Alexander Henry Kersey, 164; Graham Clifford Awdry, 162; William Warlow Gwyther, 152.

**Associates (6).**—William H. Atkin Berry, 377; Augustus William Tanner, 358; Henry Thomas Hare, 346; Robert Stark Wilkinson, 341; Frederick Henry Appleton Harcastle, 335; George Richards Julian, 297.

The following candidate is not elected:—*John Ernest Newberry*, 222.

#### Science Standing Committee.

**Fellows (10).**—William Charles Street, 398; Herbert Duncan Searles-Wood, 394; Lewis Angell, 391; Percival Gordon Smith, 385; Arthur Baker, 372; John Salmon Quilter, 368; Henry Tanner, 353; Henry Dawson, 334; Benjamin Tabberer, 330; William Warlow Gwyther, 323. The following candidate is not elected:—*Banister Fletcher*, 313.

**Associates (6).**—Henry William Burrows, 353; Francis Hooper, 332; Max Clarke, 326; Bernard John Dicksee, 299; George Pearson, 280; Matthew Garbutt, 275. The following candidates are not elected:—*Thomas Locke Worthington*, 262; *George Austin Pryce Cuxson*, 240; *Thomas Edward Mundy*, 133.

A vote of thanks to the Scrutineers having been moved from the Chair, observations were made on the arduous duties the scrutiny entailed through the number of candidates being greatly in excess of the actual number required to form the committees. Various suggestions were offered in the discussion which ensued, and the President pointed out that the voting list had been issued in accordance with the By-law [Appendix B]. The vote of thanks was then put and carried by acclamation.

#### ELECTION OF MEMBERS.

The following candidates for membership were elected by show of hands, in accordance with By-law 9:—

##### As Fellows (2).

CHARLES BUSTEED FOWLER (Cardiff).  
FRANCIS THOMAS DOLLMAN [A.].

##### As Associates (5).

HERBERT PHILLIPS FLETCHER.  
GEORGE HUBBARD.  
JOHN JAMES JOASS.  
GEOFFREY PRATER ARMSTRONG.  
WALTER ROBERT JAGGARD.

##### As Hon. Corr. Members (2).

ALEXANDER WIELEMANS (Vienna).  
FERDINAND FELNER (Vienna).

The proceedings having thus terminated, the Meeting separated at 9.15 p.m.

#### APPENDIX A.

Mr. OCTAVIUS HANSARD [F.] said that before the Reports of the Scrutineers were read he should like to ask whether there was any rule bearing upon the By-laws by which members who were placed on the voting-lists after the Council had issued their original propositions for members should have the names of their proposers disclosed. Under the By-laws, a certain number of names were attached to each name that was proposed, and he wanted to know whether there was any By-law or Rule prohibiting those names being furnished to members.

THE SECRETARY replied that it used to be the custom under the original Charter and under the original By-laws to publish on the voting-papers the names of those who were nominated by outsiders, so to speak, in the margin, and not to mix those names up with what used to be called the "House list." But since the granting of the new Charter—and the By-laws were made under that Charter—that had been entirely superseded. Any new names proposed by Fellows or Associates were put into the body of the list, just as if they had been nominated originally; there was no distinction made. This was confirmed by By-law 30: "Any seven subscribing members, of whom the majority shall be Fellows, may nominate any other member for any of the above-named offices" (that is,

President, Vice-President, Honorary Secretary, member of Council, &c.) "by delivering such nomination to the Secretary before the close of the Annual General Meeting, accompanied by a written undertaking by the nominee to serve if elected. The name of every member so nominated shall be added to the said list, which, with such added names (if any), shall be the voting-list for the election."

Mr. HANSARD thought it would be very useful if, when any name was substituted over and above those which the Council had issued, the names of the proposers were printed as heretofore, so that those outside might know who the proposers and seconders were. If he were in order he should move as a recommendation to the Council that in future such a process should be adopted.

Mr. Hansard's recommendation was supported by Mr. Bruning, with a view to having the matter discussed.

Mr. T. M. RICKMAN [A.], F.S.A., thought Mr. Hansard's suggestion might be met if the names of the proposers were published in the JOURNAL in sufficient time before the voting-papers were required to be sent in.

Mr. LACY W. RIDGE [F.] agreed that it was information with which the members should be supplied. When the Council brought out a list and other names were afterwards added, they were now quite in the dark as to who had added those other names, and such information would help members in voting.

Mr. H. W. BURROWS [A.] asked if there was nothing in the By-laws to preclude the addition of those names. They knew that the House list was backed by the nomination by the Council, and therefore it would certainly be valuable if they could have the same guarantee that those other gentlemen were at least equally backed.

THE SECRETARY said that the only restriction in By-law 30 was that while the names of all candidates for election must be printed in the same type, and in alphabetical order, "the names of members of the existing Council should be distinguished by an asterisk."

Mr. JOHN SLATER [F.], B.A., said there was no reason why the proposers' names should not be put in the JOURNAL. Members, especially country members, had often written to him on the subject of nomination, and they had not the slightest idea whose nominees they were. They got a list headed exactly in the same way as the voting-list, but bearing the words, "This is not a voting-list," and then they threw the paper away. Then they got another list with the number of candidates mentioned; but they had not kept their previous list, and they did not know who were proposed by the Council and who were proposed by outsiders. He thought the case would be met if, after the Council's list was published, and other names were proposed by members outside the Council, the proposers' names were printed with their nominees.

Mr. C. H. BRODIE [A.] pointed out that the proposal contravened the spirit of the By-law, which was that no distinction whatever should be made between candidates for election. The men must all be properly qualified and proposed, and the By-law seemed to indicate that they should all stand on the same footing, which they would not do if the Council's nominees were, so to speak, earmarked.

Mr. RIDGE said the suggestion was not that any alteration should be made in the list; they were all bound to appear in the list alike, except that members of the existing Council were marked by an asterisk; but, inasmuch as members knew by whom the Council's nominees were nominated, he thought it only fair to ask that they should have the same information exactly as to those who were added.

Mr. SLATER said that his suggestion was intended quite as much to benefit the candidates who were proposed by others than the Council, because it might be a great advantage for some of the people who were proposed from outside the Council that it should be known that they were proposed by very influential people.

Mr. BRODIE said that, unless the names of the individual members of the Council who nominated those particular gentlemen were stated, they would not put the outside nominees whose proposers' names were to be published on the same footing as the Council nominees.

Mr. SLATER explained that the Council was known, and that it was the action of the Council as a whole.

#### APPENDIX B.

Mr. C. H. BRODIE [A.] asked to be allowed to say a few words before the vote of thanks to the Scrutineers was put to the Meeting. The Scrutineers had assembled last Friday at eleven o'clock, and within a few minutes were busily engaged counting the votes, except for a short interval for lunch, till half-past seven. He himself was engaged in counting the votes for the members of the Practice Standing Committee. There was a list of 16 Fellows: 10 were elected and 6 were not. It seemed to him that it was unnecessary that so many nominations should be made to the Committees; there were more than half as many again as were elected. Was it necessary to put the Scrutineers to the trouble of counting a list containing 16 names when only 10 could be elected? He thought it should rest with the Council to recommend to the Institute the men whom they considered most fit to occupy a certain position; and, if there were only 10 seats, there could not be, in the opinion of the Council, 16 most fit men to occupy those 10 seats. He would suggest, therefore, to the Council that they should confine themselves strictly to the number of seats that there were to fill. If outsiders thought there were fit men to put up, they could nominate them; and it did not matter, because the fit men could be put on the Committees after the election, which was perfectly right.

THE HON. SECRETARY said that the idea of the Council had been that it was a good thing to put up rather more names than the number actually required, in order to give members of the Institute a choice.

Mr. H. H. STATHAM [F.] said that as a voter he certainly should prefer to have a choice of names.

Mr. THOMAS BLASHILL [F.] entirely agreed with Mr. Brodie. He could not understand why the body which had to select candidates for ten seats should put up more than ten men. Some people were so fond of a struggle, and of giving people the opportunity of a choice and of voting, that they wanted to have a lot of names put up merely that some should be thrown out. The object of those people would be fully met, he thought, if there were any names that occurred to persons outside, because they had the power of sending them in; and if the Council left it to the ordinary members of the Institute to put up the men, if no more names were put up he ventured to think that the Scrutineers would be saved a great deal of trouble. [THE HON. SECRETARY pointed out that if they were only to put up the exact number of names that were required, the election might as well be left in the hands of the Council.] He (Mr. Blashill) could not see that at all. If the Council put up the ten men they thought the best, and that nomination was approved by the Institute, they did not want an election—there was no need for it. But if any members thought that there ought to be a choice, and that the Council had left two or three out who ought to be on, it was open to members to get a sufficient number of people to sign their paper, and then there could be an election.

Mr. CHARLES FOWLER [F.] said there seemed to be some misunderstanding on the point that was being discussed. The Council were responsible for putting up the full number of members of each Committee. They must not put up nineteen if there were twenty to be elected, because they might then be left with only nineteen; but they had no power to withdraw other nominations, or to prevent other nominations. The only way out of the diffi-

culty, if they were to have this elaborate machinery to elect gentlemen some of whom never attended the Committees after all, was for the Council to be empowered to withdraw any number beyond the actual number required on the Committee. But then they might as well have the Committee nominated by the Council. He saw no other way out of the dilemma.

Mr. LACY W. RIDGE [F.] said that it was a perfectly understood thing that more names were to be nominated, not only for the Council, but for all the Committees, than were absolutely required to be elected, and that there should be an election without throwing the burden of nominating more men upon individual members. He himself was convinced that it was a very useful institution. Take the instance of the Practice Standing Committee. The Practice Committee during the last year had been in rather a curious position; they had pulled through what they were pleased to consider rather a great work, and at the same time it had been a somewhat costly one, and one that had given rise to some little differences of opinion. The election which had just taken place would, he believed, be very satisfactory to the old members who had worked on the Practice Standing Committee, because the names returned, and the order in which those names were placed, would show to the Committee that their work had received the general approbation of the Institute. If a lot of new members out of those sixteen who had been put up had headed the poll, and if the old members had been omitted from those who were returned, the feeling of the Practice Committee would have been quite different. Mr. Hall was returned at the top of the poll, and he was sure no man better deserved to be there. Had he been at the bottom of the poll, or had he been left out, then one would have thought that the policy which the Practice Committee had been pursuing had not been approved by the Institute.

THE PRESIDENT thought it desirable that the Institute should know what the By-law said, and requested the Secretary to read it.

THE SECRETARY said that By-law 30 referred to elections of the Institute. As they were aware, there were eighteen members of Council so called, and two Associate members, and the By-law stated: "Such list shall contain the names of at least twenty-two Fellows and three Associates, as nominated for election as members of Council and Associate members of Council respectively." The Council were bound to put up more names. Then the Standing Committees were elected under By-law 49 in the same way: "Procedure for the election . . . shall be as provided in By-law 30 for the annual election of the Council, so far as such provisions are applicable."

Mr. T. M. RICKMAN [A.], F.S.A., thought that there might be a little further intimation given as to the exact position of the members put up for election on the Standing Committees. The Standing Committees consisted of a certain number, about two-thirds of whom had been elected by the members, and the remainder had been left to the election either of the Council or of the Standing Committees. His impression was that it was very desirable not always to fill up the full number of the names, but to leave it for a few weeks, because there might be more outsiders who it was very desirable indeed should be members of each of those Committees. But he thought that in regard to the asterisks that were put against the names of present members of the Committees, some distinction should be made between those members who had been elected on previous occasions or on the last occasion and those who had been nominated either by the Council or by the Standing Committees. Then the members would know that the man they were voting for had already been elected either by the members of the Institute, or that they were nominees of the Council; and if that distinction were made, he thought there would not be the necessity for the large number put forward as in the present case.



